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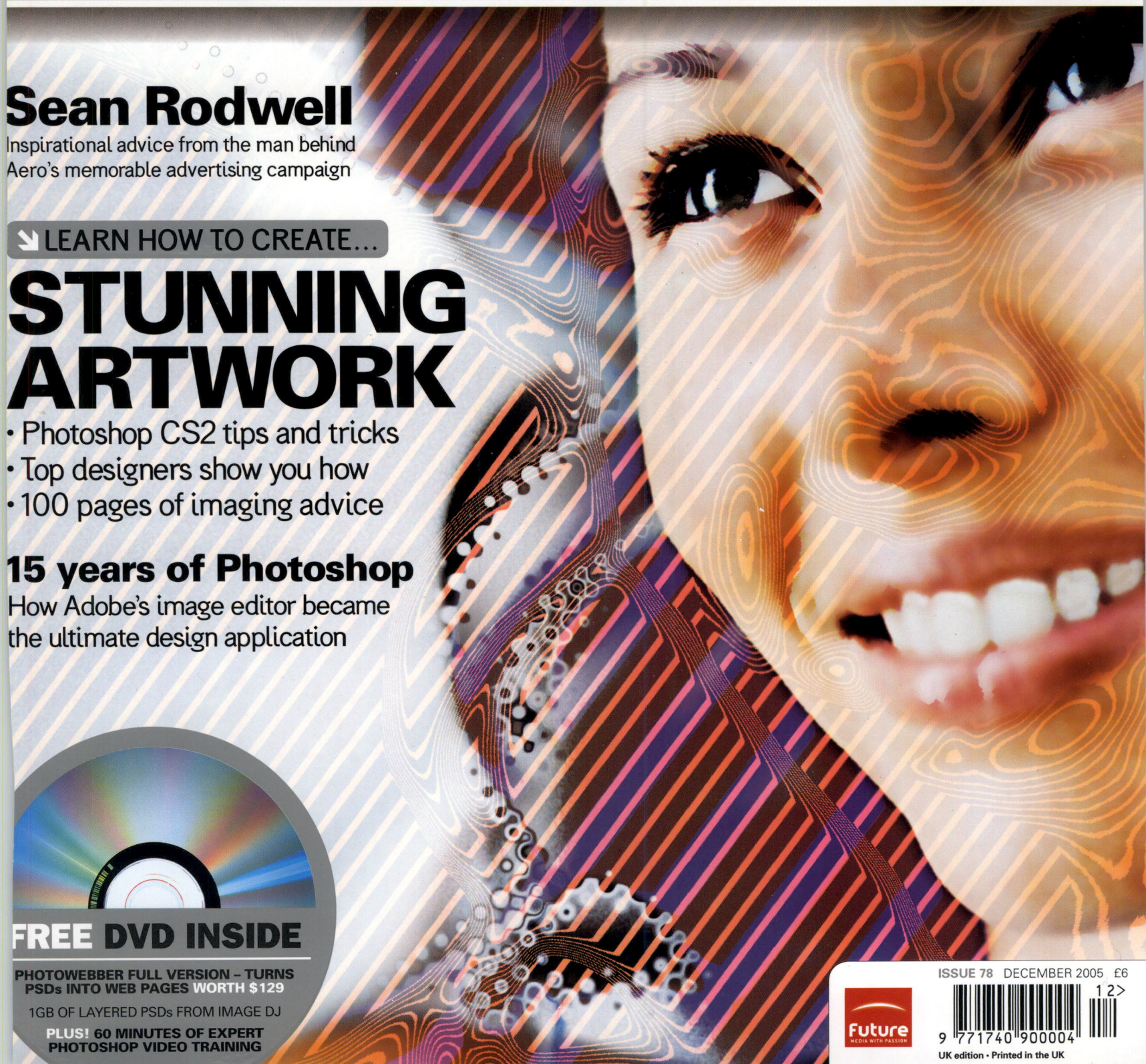

Sean Rodwell
Inspirational advice from the man behind Aero's memorable advertising campaign

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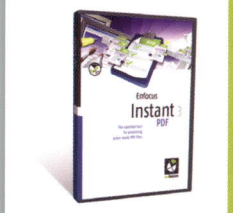

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[t] UK orders and renewals: 0870 837 4722
[t] UK subscription queries: 0870 837 4773
[t] Overseas orders: +44 1858 438 794
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Printed in the UK by BGP

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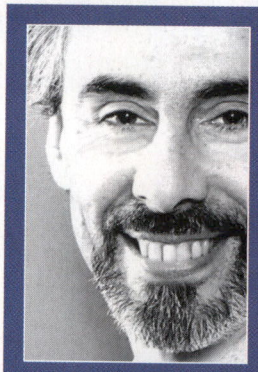
ABC Computer Arts Projects is a member of the Audit Bureau of Circulations Jan–Dec 2004: **12,719**

Welcome



You know what I hate? Apart from rhubarb, that is. (And Roobarb. But never mind that now...) I hate job ads asking for Mac Operators. (Especially 'middleweight' ones. What does that mean? 'Lard-arses need not apply'?) Invariably, when you look at the requirements, they want someone expert in a dozen programs, from page layout to illustration and probably *Flash* and web page creation too. So how the hell does 'operating' a Mac begin to describe what the job entails? You wouldn't describe Seurat as a 'paintbrush operator', or Michelangelo as a 'hammer-and-chisel operator'. It's not the Mac doing the work, it's a creative human being.

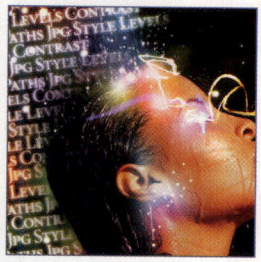
That said, though, it would make sense if adverts asked for a 'Photoshopper', because (much as Adobe hates it) 'Photoshopping' is really the only word for it, right? So this issue we'll help you become a better Photoshopper – whether you're 'operating' a G5 or a P4, OS X or XP. As well as information-packed features on the evolution of *Photoshop*, what's new in *CS2* and automating your workflow with actions, we've got a whole bunch of expert tutorials in which some of today's hottest Photoshoppers explain their techniques and reveal their secrets. Their advice could turn you into a real design heavyweight!
Alex Summersby

Expert creatives contributing to this issue include...

COVER IMAGE Y.O.L.O

A newly formed design collective based in the north of England created by three recent design graduates. Y.O.L.O stands for You Only Live Once and forms their mission statement as they gain momentum in the design industry.
[w] www.youonl.yliveonce.co.uk

Photo: Digital Vision

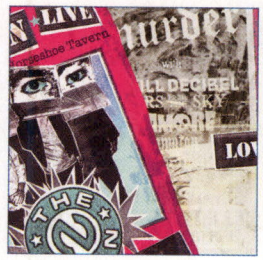


Chuck Anderson

Chuck is an artist based in Chicago. Under the name NoPattern he has worked with clients such as *NYLON* magazine, Audi, Microsoft and more. He also jointly runs the popular culture portal THE BRILLIANCE!
[w] www.nopattern.com
[w] www.thebrilliance.com

Why Not Associates

A British design company with global clients including Nike and the BBC, Why Not did the typographic treatment for First Direct's telephone banking TV commercials. Last year Thames & Hudson published *Why Not Associates ?2*, a book of the studio's work.
[w] www.whynotassociates.com



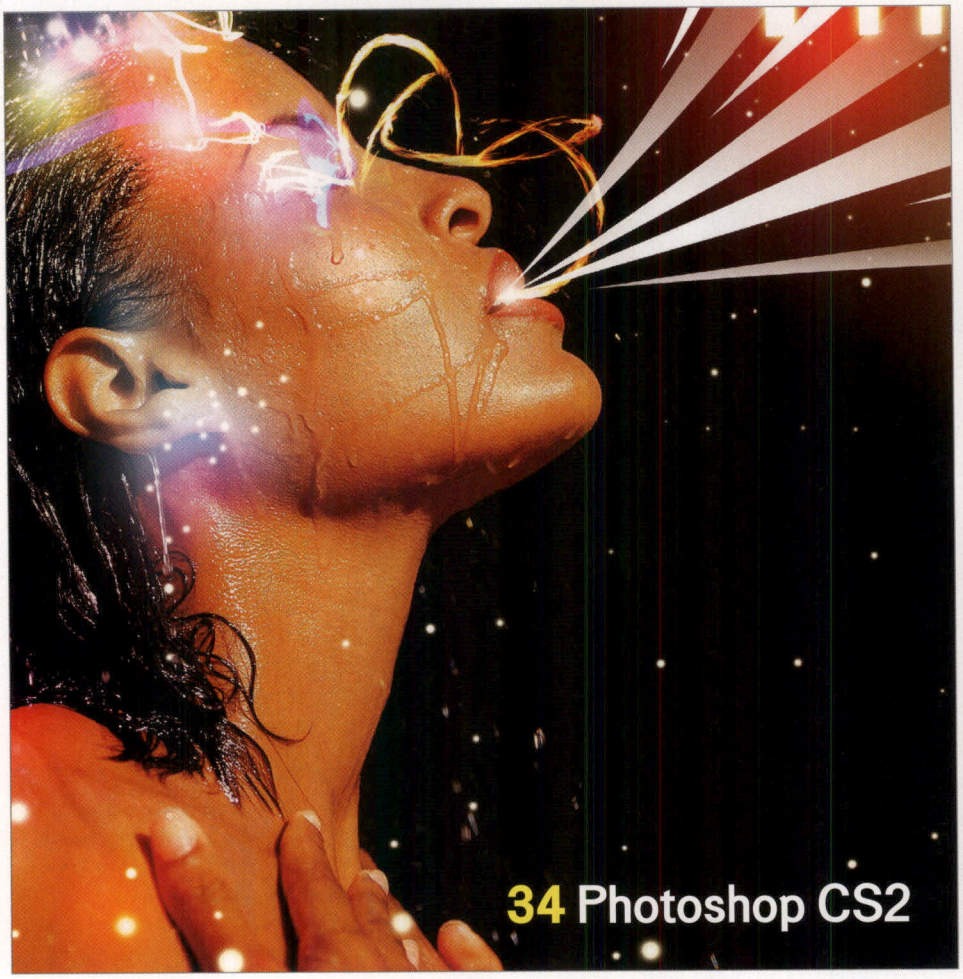
Derek Lea

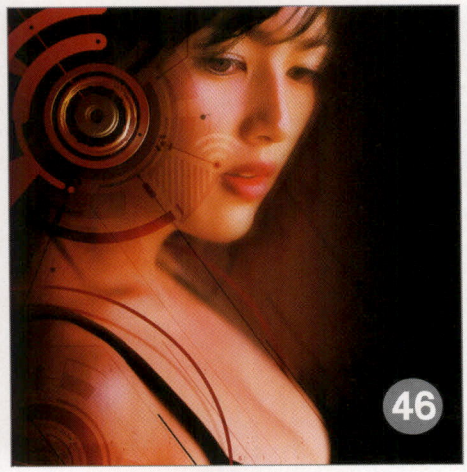
Based in Canada, award-winning illustrator Derek Lea specialises in corporate, advertising, editorial and conceptual illustration. Derek is a *Photoshop* master, but regularly makes use of a whole range of software in his work.
[w] www.dereklea.com

Tell us what topics you'd like to see covered in-depth in *Computer Arts Projects*. Contact us on: **[e] capeditor@futurenet.co.uk**

We're always on the lookout for new artists as well as established creatives – so if you're interested in contributing to the mag, please send some examples of your work to **[e] johann.chan@futurenet.co.uk**

COMPUTER arts projects contents





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6 Showcase

New and exciting *Photoshop* work from a batch of the best international digital image-makers out there

12, 32, 50, 74 Milestones

We chart the changing face of Photoshop... How many of these have you seen on your own screen? How many do you not even recognise?

14 History of Photoshop

It's 15 years since Adobe shipped version 1.0 of *Photoshop*. We track its path to *Creative Suite 2* supremacy

34 Photoshop CS2 tricks

Discover the new features and tools in *Photoshop CS2* that will enable you to improve your workflow... and your output

58 Actions explained

Embrace the power of *Photoshop's* actions and other automation features, and free up more time to be creative

82 Graduate competition

Find out who has won a *Computer Arts Projects* commission and see the best submissions from up-and-coming designers...

PROFILES

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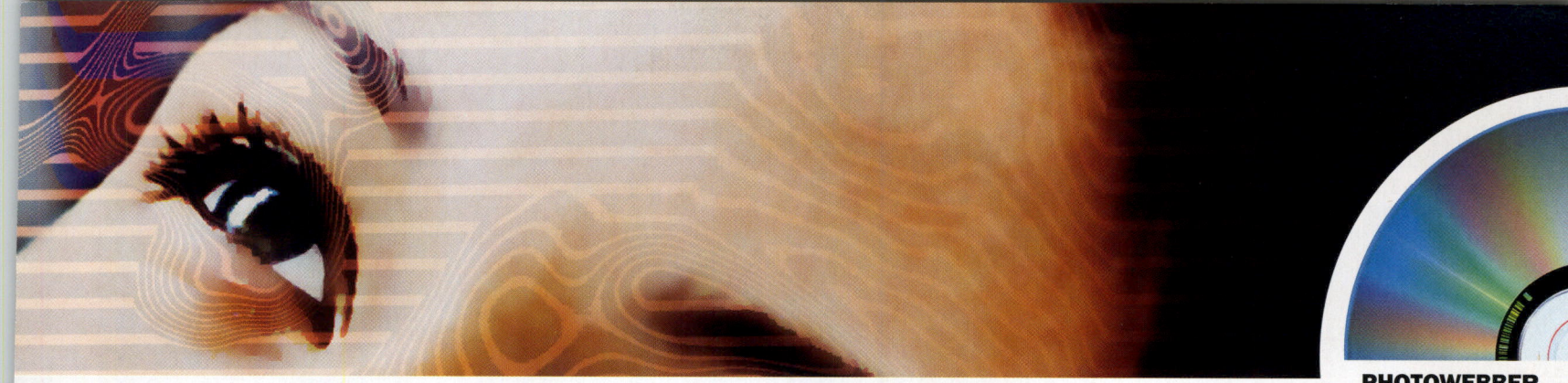
"If I can't draw or paint it in real life, I won't do it in *Photoshop*," says Sarah Howell about her dynamic fashion illustration

46 Sean Rodwell

"It was like a rebirth and then an addiction ever since." Sean Rodwell, the man behind the Aero ad, explains his relationship with *Photoshop*...

64 Bob Staake

"It's not enough to be able to draw a pretty picture that just impresses other illustrators." For Bob Staake, concept comes first



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Software worth $129!
See page 90...

TUTORIALS

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Experiment with the Displace filter to create your own version of our cover image. You'll soon be adding textures with ease...

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Studiospooky shows you how to mix photography with *Photoshop* channel effects to make dramatic images

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92 PhotoWebber
Follow our tutorial on using the FULL software that's yours on this issue's DVD

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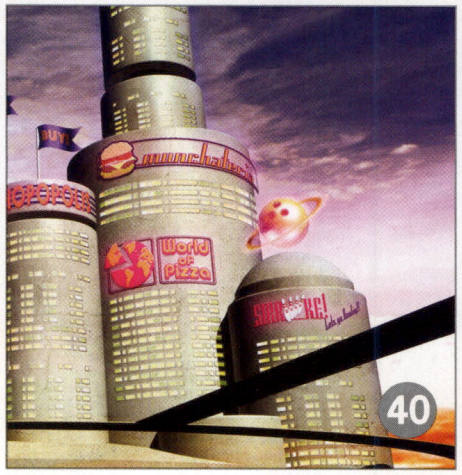
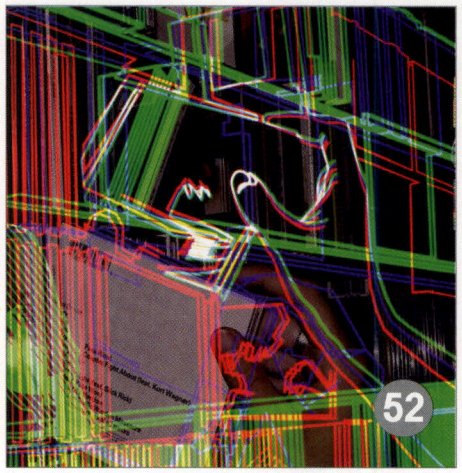
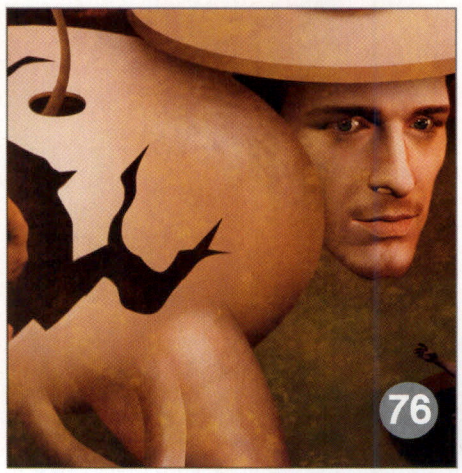
We show you how to create a website in *Photoshop* with this demo software







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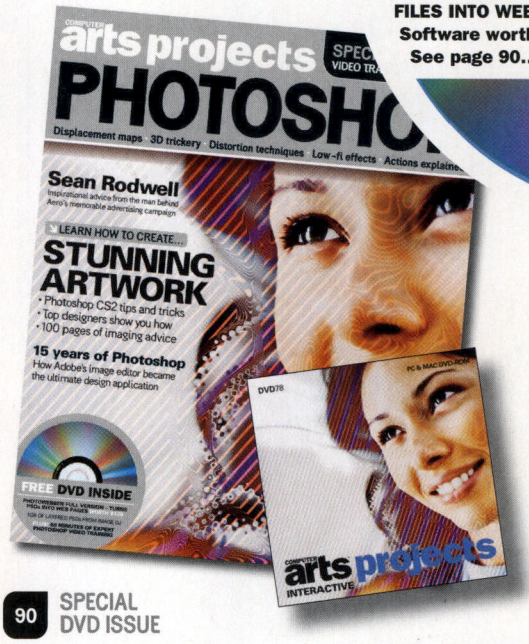

90 SPECIAL DVD ISSUE

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6 First-class Photoshop
Marvel at some of the best *Photoshop* work from around the globe

Photoshop showcase

Digital image-makers from the UK, France, Latvia, California and Australia draw attention with their stunning new *Photoshop* work...

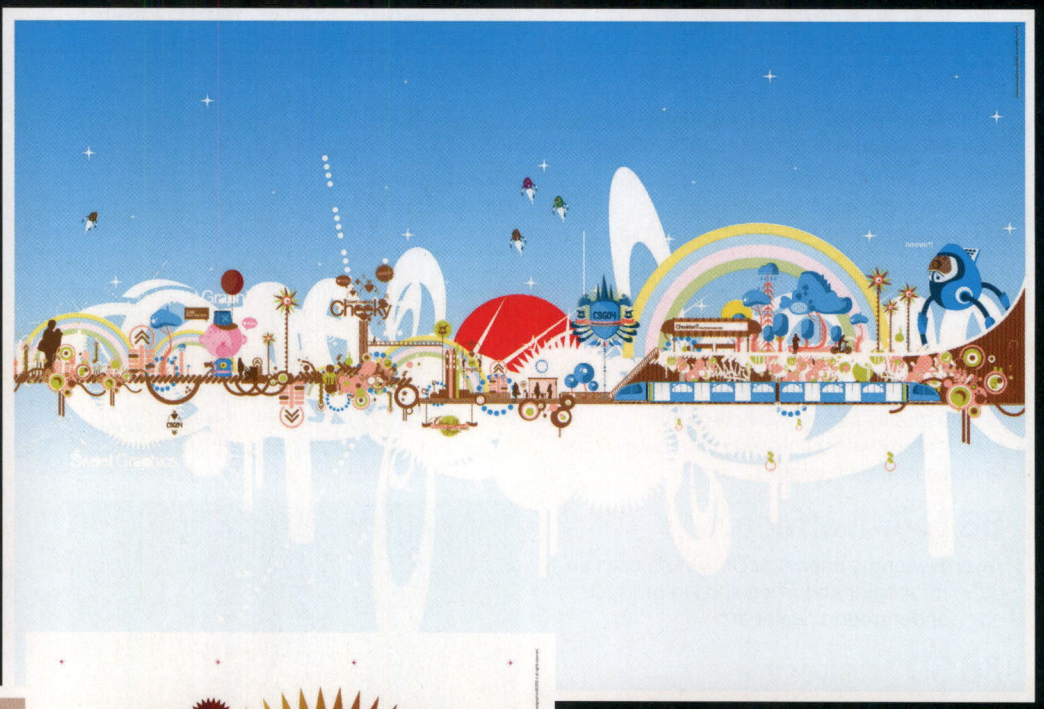
Thibault Choquel

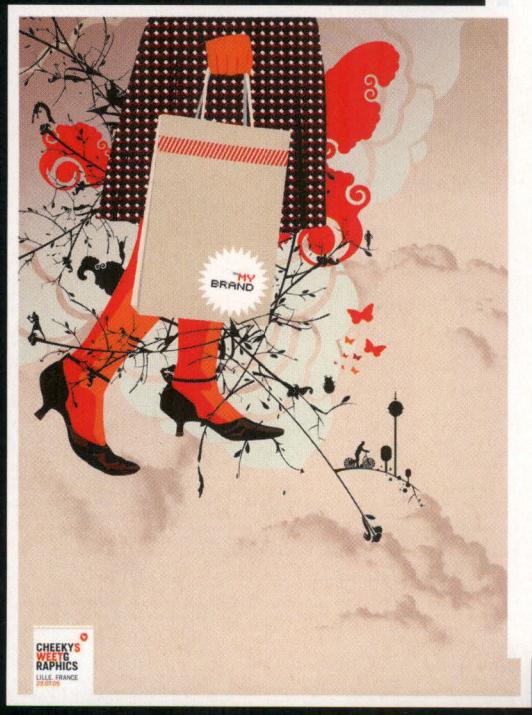
Lille, France

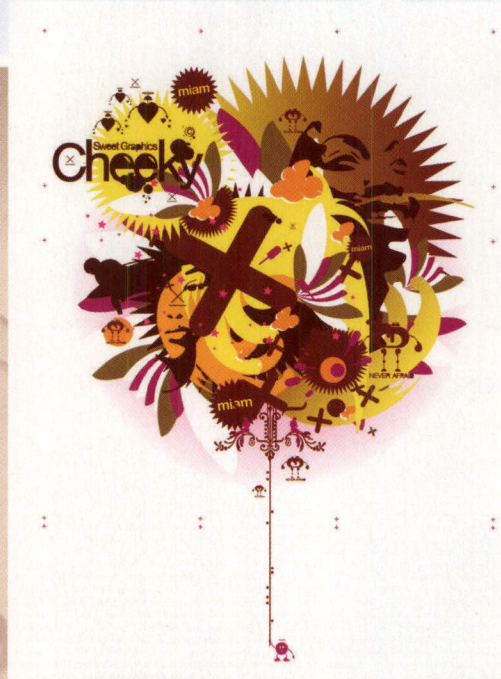
How long have you been using *Photoshop*?
"Three years."

After working and studying in France and Copenhagen, Thibault Choquel settled in France in 2003 and has worked for several communication firms and as a freelancer. His design studio, Cheeky Sweet Graphics, deals with different graphical approaches, from print to web, branding to illustration. "Cheekysweetgraphics has been developed to entertain," says Thibault. "Fresh, optimistic and childish. So cheeky!!! So sweet!!"

Contact: **[w]** www.cheekysweetgraphics.com







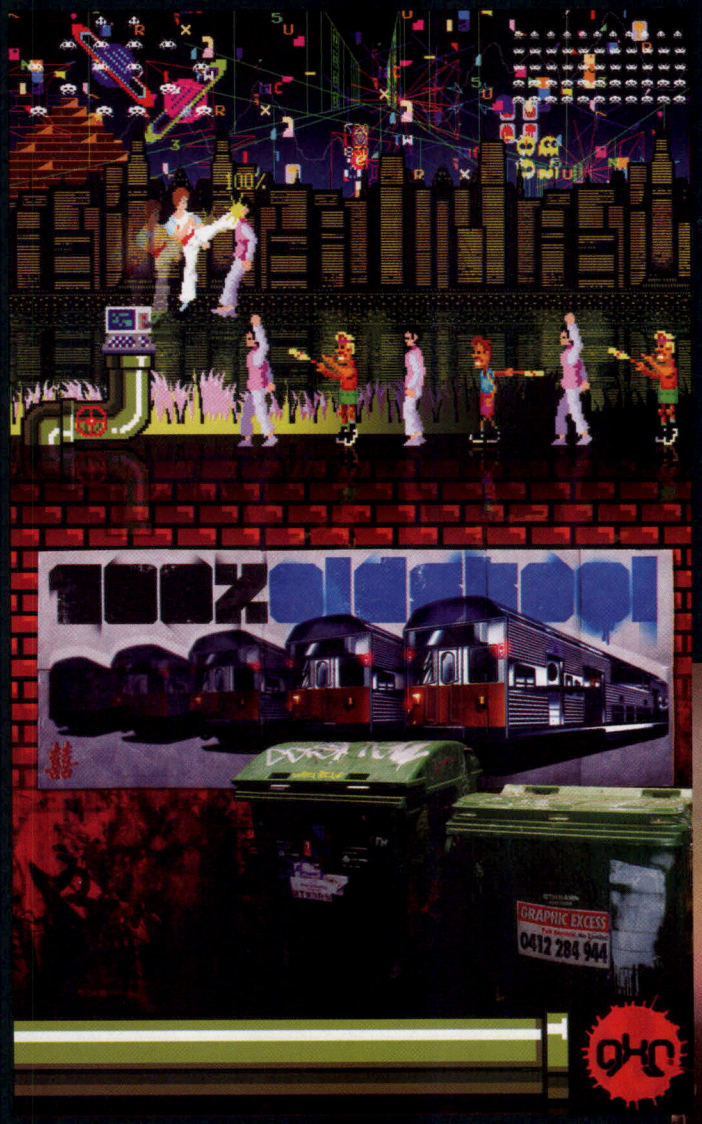
Sam Thorne

Sydney, Australia

How long have you been using *Photoshop*?
"Since version 2 came out."

"My work simply aims to pay respect to my creative inspirations," begins Sam. "My main influences are hip-hop, Japanese pulp cultures, spaghetti westerns, the golden age of technology, rock 'n' roll and pop art. Through digital media, I condense or remix the stylistic elements of my tastes into designs. I want to set up a clothing brand based on these ideals and get filthy rich in the process. Then retire. Peace."

Contact: **[w]** www.graphicexcess.com



Photoshop showcase

Jonathan Garin
UK

How long have you been using *Photoshop?*
"Nine years."

"The main idea behind these works is to communicate an underwater jungle disco with jelly aliens..." begins Jonathan. "Actually, they are just spin-offs of a short self-promotional piece I recently created which is on my site. I use *Photoshop* most of the time to create work for clients, so these pieces are just for fun."

Contact: **[w]** www.pinthin.com

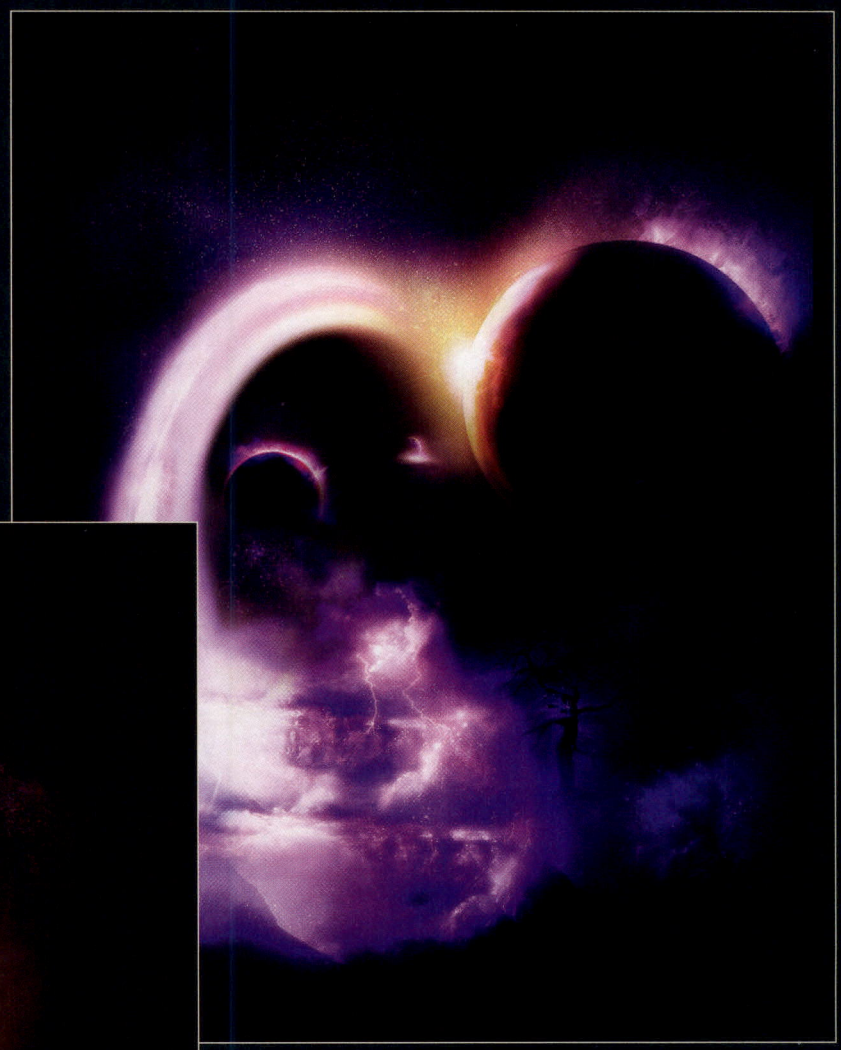
Andrey Shabelnikov

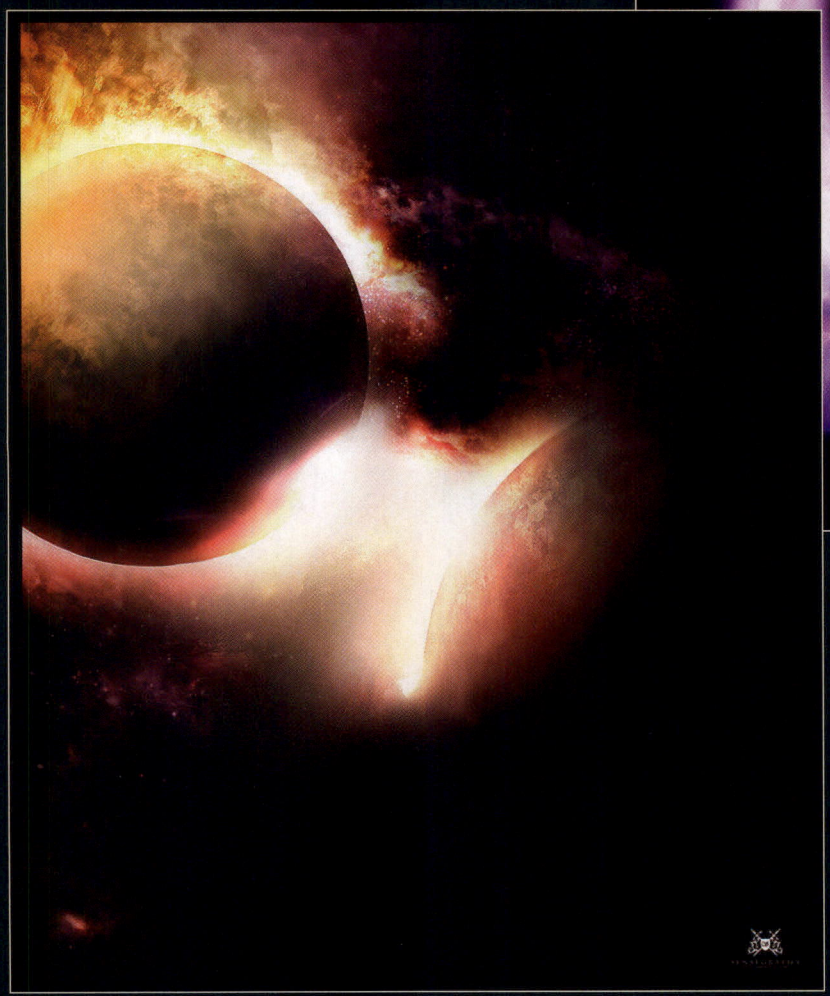
Latvia

How long have you been using *Photoshop?*
"Since the fourth version."

"The idea behind this work is the end of time – something which has always fascinated me and something I've always dreamed of," explains Andrey. "I started out creating graphics for my school work. However, after some time I decided to go deeper into design and photography. I started creating effects over pictures I had shot earlier. These days, *Photoshop* and the Wacom tablet have become essential tools of my workflow process."

Contact: **[w]** www.sensegraphy.com





Photoshop showcase

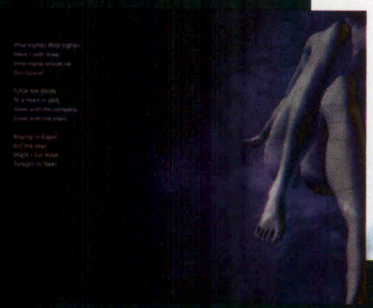
Maria Rodriguez

California, USA

How long have you been using *Photoshop?* "Five years. Prior to that I studied art, focusing on painting."

"My inspiration comes from many places, things and emotions," says Maria. "Sometimes I am influenced by poems – such as my Emily Dickinson pieces, which depict suffering in human nature. Often it is just beauty itself that inspires the piece, the flawlessness of skin or pure imagination. The possibilities are endless."

Contact: **[w]** minercia@gmail.com



James Wignall

Leeds, UK

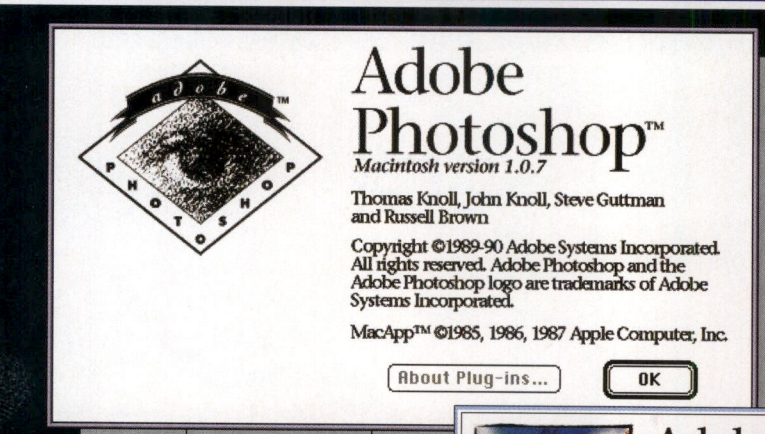
How long have you been using *Photoshop*?
"I started using it around eight years ago, in my final years at secondary school."

"My ideas mainly come from nature, life and just things around me," explains James. "I'm really into organic movements and flows, trying to make static images look and feel as if they're moving. Ever since I can remember, I've always been told that I have a pretty unique was of looking at things."

Contact: **[w]** www.mutanthands.com

15 years of PHOTOSHOP

The evolution of the world's premier imaging app…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Macintosh version 1.0.7
Thomas Knoll, John Knoll, Steve Guttman and Russell Brown
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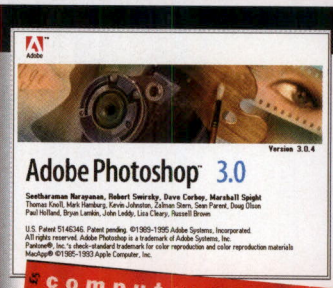

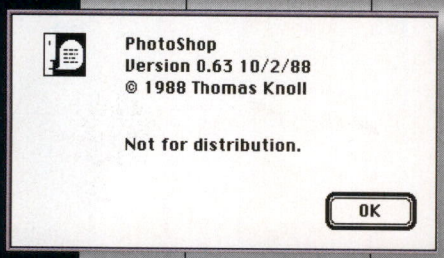

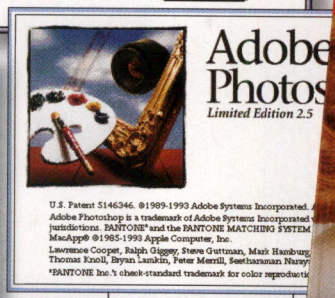

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1990	1991	1992	1993	1994	1995	1996	1997
PHOTOSHOP 1.0 RELEASED: February CODENAME: N/A LOWDOWN: Adobe releases the first version of the Mac-only program it licensed from a company called Barneyscan. Created several years earlier by brothers Thomas and John Knoll and originally named *Image Pro*, the first version of *Photoshop* is designed to help photographers manipulate scanned slides. The rest, as they say, is history.	**PHOTOSHOP 2.0** RELEASED: June CODENAME: Fast Eddy LOWDOWN: Sixteen months down the line, *Photoshop* receives its first update. The most exciting new feature is the ability to work with paths.	**PHOTOSHOP 2.5** RELEASED: November CODENAME: Merlin/Brimstone LOWDOWN: A significant development in *Photoshop* history arrives in the form of its first Windows release. Codenamed 'Brimstone', the Windows version proves to be the foundation for Adobe's almost total dominance of the imaging arena.		**PHOTOSHOP 3.0** RELEASED: September CODENAME: Tiger Mountain LOWDOWN: Can you imagine working in *Photoshop* without Layers? Bob Staake, the subject of one of this issue's profiles, still works without them, but 3.0 is rightly recognised as a milestone release for being the first version of the app to offer Layers.	An exciting new magazine called *Computer Arts* is launched in December to capitalise on all the excitement digital art is generating.	**PHOTOSHOP 4.0** RELEASE: November CODENAME: Big Electric Cat LOWDOWN: Nothing as epoch-shattering as the ability to use Layers appears in version 4.0, but the introduction of editable type is universally welcomed by graphic designers.	

Adobe
Version 6.0
Venus in Furs
Thomas Knoll, Mark Hamburg, Marc Pawliger, Stephanie Schaefer, Sau Tam, Karen Gauthier, Joe Ault, Jason Bartel, Scott Byer, Jeff Chien, Scott Cohen, Chris Cox, Todor Georgiev, Jerry Harris, Sarah Kong, Seetha Narayanan, Saan Parent, John Penn, Tom Ruark, Akiko Sherry, Russell Williams, John Farmer, Matt Wormley, Ryan Stubblefield, Michael Schuster, Sandra Alves, John Peterson, John Worthington, Cris Rys, Del Schneider, Rick Wulff, Dave Howe, Kevin Connor
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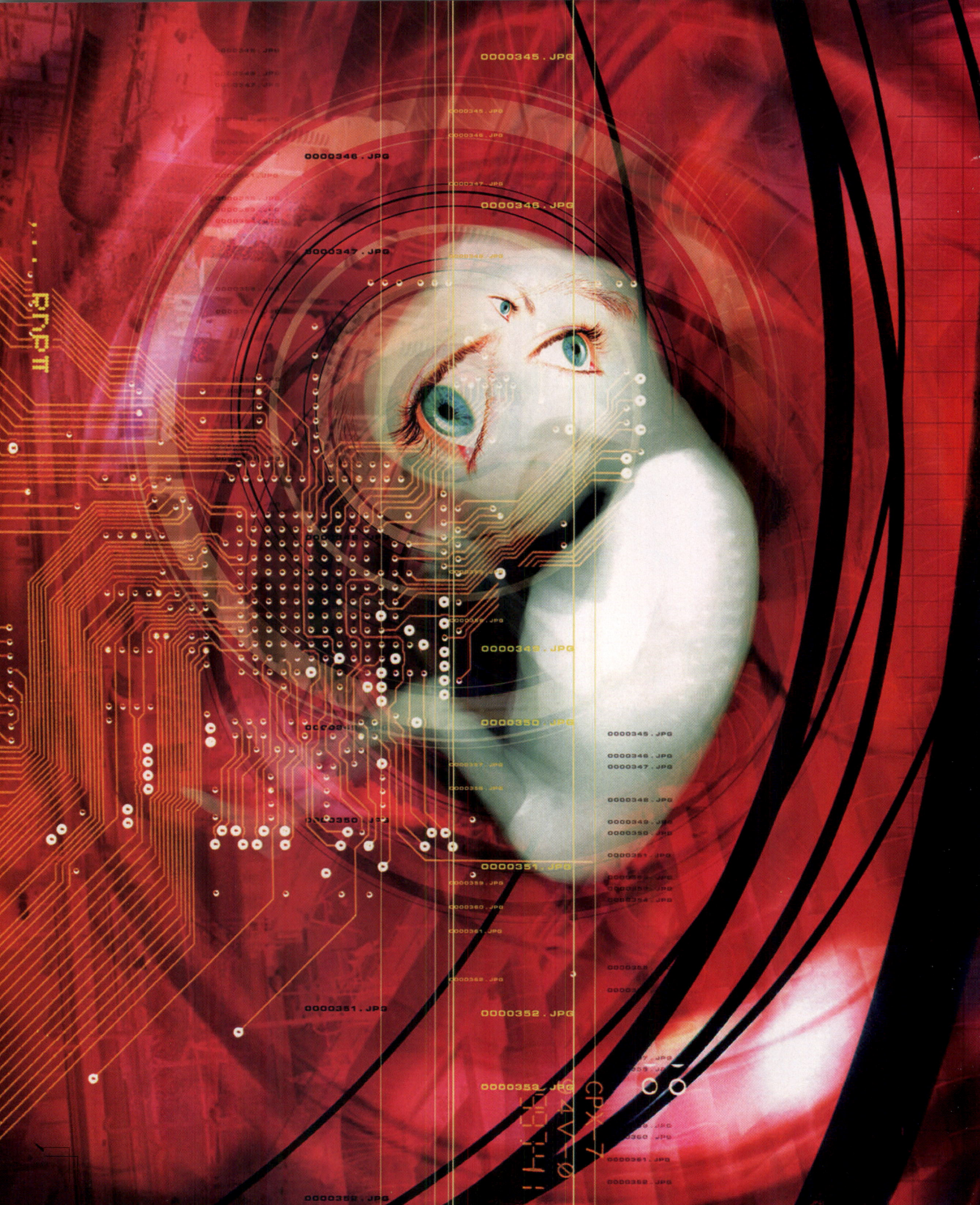
Adobe Photoshop CS2

1998	1999	2000	2001	2002	2003	2004	2005
PHOTOSHOP 5.0 RELEASED: May CODENAME: Strange Cargo LOWDOWN: Nobody is entirely sure if 'Strange Cargo' is named after a 1940 Clark Gable movie, a William Orbit record or something else entirely, but the advent of the History palette comes to the rescue of many an accident-prone graphic designer.	**PHOTOSHOP 5.5** RELEASED: February CODENAME: N/A LOWDOWN: A rare 0.5 update acknowledges the importance of the Internet by introducing the Web imaging app *ImageReady*. The first *Photoshop* edition of *Computer Arts Projects* (then called *Computer Arts Special*) is also published.	**PHOTOSHOP 6.0** RELEASED: September CODENAME: Venus in Furs LOWDOWN: Version 6.0 is a landmark release in many ways. The new vector features blur the boundaries between pixel and bitmap, and drawing tools allow custom shapes to act as vector masks. That's not all. The type tools come of age and editable layer effects are rebadged as more funky sounding Layer Styles.		**PHOTOSHOP 7.0** RELEASED: March CODENAME: Liquid Sky LOWDOWN: The seventh incarnation of *Photoshop* is something of a disappointment after the sumptuousness of 6.0. The only really significant additions are a new paint engine and the rather splendid Healing Brush. A minor update provides support for Apple's dual processor Power Mac G5s.	**PHOTOSHOP CS** RELEASED: October CODENAME: Dark Matter LOWDOWN: Adobe decides numbers are a bad idea and unveils a major rebranding of *Photoshop*. The trademark eye is jettisoned along with the digits and replaced with a multi-coloured feather. The program is by now a jack-of-all-trades, catering for all kinds of creatives from video editors to web designers.		**PHOTOSHOP CS2** RELEASED: April CODENAME: Space Monkey LOWDOWN: The current version of *Photoshop* is triumphantly revealed. Key features include the ability to warp images (at last), a lens correction filter, the ability to clone in perspective with the Vanishing Point tool and support for HDRI. Find out more in our special feature on page 34 — and don't miss the chance to win a copy of *Photoshop CS2* on page 19.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Feature

The history of Photoshop

The next time you fire up your copy of *Photoshop*, spare a thought for the scores of developers and the reams of code that have gone into making it...

While you won't find it printed on any calendar, 2005 marks a quiet anniversary for the program that you, and many other graphic designers, probably use the most. It was 15 years ago in February that Adobe shipped version 1.0 of *Photoshop* – still its most popular (and lucrative) application, and possibly the only bit of software to have spawned its own verb form.

But the true origins of *Photoshop* go back even further. The program whose splash screen now displays 41 names was originally the product of just two brothers, Thomas and John Knoll, as fascinated by technology as they were by art. It was a trait they'd inherited from their father, a photography buff with his own personal darkroom in the basement and a penchant for early home computers.

Thus Thomas dabbled with photography, learning about colour correction and contrast in the darkroom, while John happily tinkered with his dad's Apple II computer. When their dad – clearly an early adopter – bought one of the first Macs on the market in 1984, both were bowled over by its capabilities. Yet ironically it was its frustrating inadequacies that would eventually lead to the multi-million dollar application sitting on nearly everyone's hard drive today.

> "Most software companies turned their corporate noses up at *Photoshop*"

Over the next few pages we'll trace the colourful history of *Photoshop* – possibly one of the last true 'back bedroom' apps in an era of anonymous design-by-committee – and look at its possible future.

In the beginning

By 1987, John Knoll was working at Industrial Light and Magic – Lucasfilm's nascent special effects division, founded for *Star Wars* – while Thomas was studying for his Ph.D. on image processing at the University of Michigan. Having just bought a brand-new Apple Mac Plus to help out with his thesis, he was dismayed to find it couldn't display greyscale images on the monochrome monitor. So, in true hacker style, he set about writing his own code to do the job.

Unsurprisingly, John was also working on image processing at ILM, and during a holiday visit he became very impressed with Thomas's progress. In the book *CG 101: A Computer Graphics Industry Reference*, John says: "As Tom showed me his work, it struck me how similar it was to the image-processing tools on the Pixar [a custom computer used at ILM]." Thus the pair began to collaborate on a larger, more cohesive application, which they dubbed – excitingly – *Display*.

It wasn't long before John had bought a new colour Macintosh II and persuaded Thomas to rewrite *Display* to work in colour. Indeed, the more John saw of *Display*, the more features he began to ask for: gamma correction, loading and saving other file formats, and so on.

Although this work distracted Thomas from his thesis, he was quite happy to oblige. He also developed an innovative method of selecting and affecting only certain parts of the image, as well as a set of image-processing routines – which would later become plug-ins. A feature for adjusting tones (Levels) also emerged, along with controls for balance, hue and saturation. These were the defining features of *Photoshop*, but at the time, it was almost unthinkable to see them anywhere outside of specialist processing software in a lab – or at ILM.

By 1988, *Display* had become *ImagePro* and was sufficiently advanced that John thought they might have a chance at selling it as a commercial application. Thomas was reluctant: he still hadn't finished his thesis, and creating a full-blown app would take a lot of work. But once John had checked out the competition, of which there was very little, they realised *ImagePro* was way ahead of anything currently available.

From Image Pro to Photoshop

Thus the search began for investors. It didn't help that Thomas kept changing the name of the software, only to find a name was already in use elsewhere. No one is quite sure where the name 'Photoshop' originally came from, but legend has it that it was suggested by a potential publisher during a demo, and just stuck. Incidentally, splash screens from very early versions show the name as '*PhotoShop*' – which seems far more in line with today's craze for ExTraneous CapitaliSation.

Remarkably in retrospect, most software companies turned their corporate noses up at *Photoshop*, or were ›

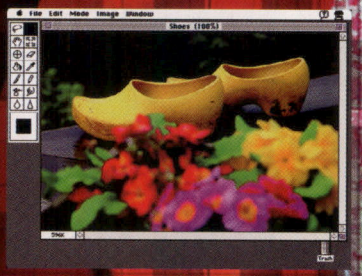
Main image: Paul Price's intense *Photoshop* style, a dense combination of layers, imagery, text and other random elements, has garnered him work for the likes of Apple, *The Guardian*, *Q* magazine and Shell. See more of his work at [w] www.paulprice.org.uk.

The Tao of Photoshop

Not surprisingly, the look and layout of *Photoshop's* workspace have evolved over the years, though it still bears a family resemblance...

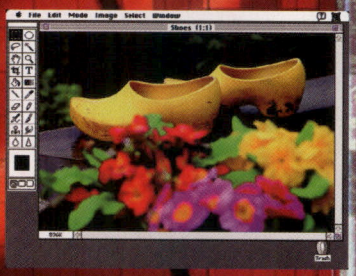
Photoshop 0.63

Early pre-release version from 1988, when it was actually called '*PhotoShop*'.



Photoshop 1.07

Bug-fix update of the first release version from Adobe, February 1990.



Photoshop 2.5

November 1992, and the first version for the PC, code-named Brimstone.

Photoshop 3.04

Version 3 introduced layers for the first time, to everyone's delight, in September 1994.

Photoshop 4

Adjustment layers and editable type came with version 4 in 1996/1997.

This *Computer Arts* cover image was created by Joe Magee for the release of *Photoshop 4.0* way back in November 1996.

already developing similar applications of their own. Only Adobe was prepared to take it on, but a suitable deal wasn't forthcoming. Eventually, though, a scanner manufacturer called Barneyscan decided to bundle it with its scanners, and a small number of copies went out under the name *Barneyscan XP*.

Fortunately for the future of digital imaging, this wasn't a long-term deal, and John soon returned to Adobe to drum up more interest. There he met Russell Brown, then Art Director, who was highly impressed with the program and persuaded the company to take it on. Whether through naivety on Adobe's part or canniness on the brothers', *Photoshop* was not sold wholesale but only licensed and distributed, with royalties still going to the Knolls.

It wasn't as if this deal meant the Knoll brothers could sit back and relax; if anything, they now had to work even harder on getting *Photoshop* ready for an official, 1.0 version release. Thomas continued developing all the main application code, while John contributed plug-ins separately, to the dismay of some of the Adobe staff who viewed these as little more than gimmicks.

Curiously, this attitude still remains among some purists, who claim that most *Photoshop* plug-ins are somehow 'cheating' and not be touched under any circumstances, while others swear by their flexibility and power when used properly.

As in the program's formative days, there were always new features to be added, and somehow Thomas had to make time to

Love and hate: Photoshop controversy

With many of *Photoshop's* fans being so passionate, it's no surprise that the program has experienced its fair share of controversy over the years.

The first grumblings of disquiet came with the launch of version 3.0, the Windows port, which also featured a radical redesign of the interface in an attempt to make it more logical. Even in those early days, *Photoshop* had a loyal following and many users were outraged that their favourite key command or tool had been changed for seemingly no reason. Though some threatened to stop using the program, most soon adapted.

The launch of version 8 – *Photoshop CS* – in 2003 also ruffled a few feathers. Adobe had always been well aware that pirate versions of *Photoshop* were rampant – indeed, it may well be the most widely pirated program in the world. Previous anti-piracy measures had been low-key, but *Photoshop CS* was the first version to include mandatory online activation à la Windows XP. Legitimate users complained that this made it harder for them to upgrade their computer or run versions on various machines, but Adobe has no plans to remove activation.

Another, unannounced, restriction made its way into version 8. It soon became apparent that the program simply refused to scan, print or even display images of major currency notes, in an effort to reduce easy counterfeiting. Again, some artists argued that this was a somewhat draconian restriction on their creativity, but the company was unrepentant: "As a market leader and a good corporate citizen, this just seems like the right thing to do," said Adobe's Kevin Connor.

Sean Rodwell is one of the most exciting *Photoshop* talents about at the moment. See more of his work from page 46.

code them. With the encouragement of John, Russell Brown – soon to become *Photoshop*'s biggest evangelist – and other creatives at Adobe, the application slowly took shape. It was finally launched in February 1990.

Digital imaging for everyone

This first release was certainly a success, despite the usual slew of bugs. Like the Apple of today, Adobe's key marketing decision was to present *Photoshop* as a mass-market, fairly simple tool for anyone to use – rather than most graphics software of the time, which was aimed at specialists.

With *Photoshop*, you could be achieving the same things on your home desktop Mac that were previously only possible with thousands of dollars of advanced equipment... at least, that was the implicit promise. There was also the matter of pricing. Letraset's *ColorStudio*, which had launched shortly before, cost $1,995; *Photoshop* was less than $1,000.

With development of version 2.0 now underway, Adobe began to expand the coding staff. Mark Hamburg was taken on to add Bézier paths, while other new features included the Pen tool, Duotones, import and rasterisation of *Illustrator* files, plus, crucially, support for CMYK colour. This was another canny move on Adobe's part, as it opened up the *Photoshop* market to print professionals for the first time. The program's first Product Manager, Steven Guttman, started giving code names to beta versions, a practice which survives to this day. 'Fast Eddy' – version 2 – was launched the following year.

Until now *Photoshop* was still a Mac-only application, but its success warranted a version for the burgeoning Windows graphics market. Porting it was not a trivial task: a whole new team, headed by Bryan Lamkin, was brought in for the PC. Oddly, although there were other significant new features such as 16-bit file support, this iteration was shipped as version 2.5.

Like that difficult third album which can make or break a band, version 3 had to really deliver if it was to corner the market. Fortunately, the team had a whopper of an ace up their sleeve: layers.

By general consensus, the addition of layers has been the single most important aspect of *Photoshop* development, and probably the feature which finally persuaded ›

The power behind the throne

We introduce you to three of the people who have helped to shape *Photoshop* throughout its varied history...

Photo: © Jeff Schewe

Andrei Herasimchuk

Generally considered to be one of the first official interface designers at Adobe, he was brought in from version 4 to unify the UI style of all Adobe's products. Caused something of a stir when he radically redefined many of *Photoshop*'s tools and shortcuts, prompting a minor rebellion from users at the time, but his basic template remains to this day. Andrei now works at Involution Studios, **[w]** www.involutionstudios.com.

Bryan Lamkin
Senior Vice President of Digital Imaging and Digital Video, Adobe

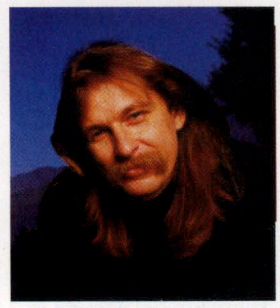
Bryan Lamkin led development of the first Windows version of *Photoshop*, version 3.0, which required a total rewrite of the original code. He now oversees the 'big picture' for *Photoshop* and other *Creative Suite* products, as well as giving numerous talks at conferences and shows. He jokingly referred to version 3.0 as being the last *Photoshop* release necessary, as it was now finished.

Russell Brown
Senior Art Director, Adobe

Photoshop evangelist and general madman, Russell is famed for his frenetic demos and 'wacky' sense of humour and was instrumental in convincing Adobe to license the app in the first place. He makes a big song and dance – sometimes literally – about *Photoshop* at various shows and conferences, as well as being a skilled artist in his own right.

Kai Krause

Seemingly appearing out of nowhere in 1992, this eccentric German seemed to have an almost intuitive knack for making *Photoshop* do amazing things. He first become known for his 'power tips': deeply mathematical methods of creating new effects, such as the use of 'chops' (channel operations). Later he went on to found MetaTools, which became MetaCreations, and produced a swathe of effects plug-ins and other innovative, if sometimes gimmicky, tools (including 'Kai's Power Tools'). He virtually retired from the software business in the late '90s, becoming disillusioned with market pressure, and now works quietly on his own projects in a castle in Germany.



Left: *Photoshop* artist Nessim Higson is a regular contributor to *Computer Arts Projects*. See more of his work at **[w]** www.iamalwayshungry.com.

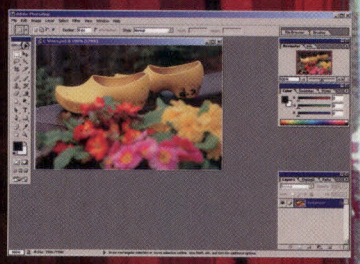
The Tao of Photoshop continued...

Photoshop 5
The History palette and colour management were added in version 5, released in May 1998.

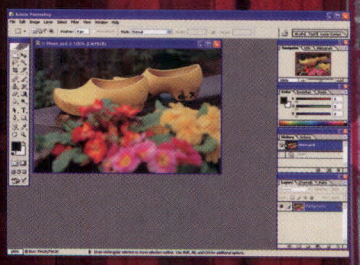
Photoshop 5.5
Now bundled with *ImageReady*, plus vector shapes and the Extract tool.

Photoshop 6
The Healing brush and Liquify filter popped up in version 6, released in September 2000.

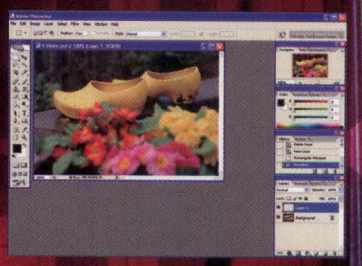
Photoshop 7
Improved text handling and the optional Camera RAW plug-in, March 2001.



Photoshop CS (8)
Many significant additions to the first *Creative Suite* edition, October 2003.



Photoshop CS2 (9)
The most current version, released this year. So what's next...?



Thanks to Marcin Wichary of the GUIdebook Gallery for allowing us to use his images. See [w] www.guidebookgallery.org for more.

An image created by Jason Cook for *Computer Arts* issue 30, to coincide with the release of *Photoshop 5.*. See what Jason is creating these days at [w] www.jasoncook.co.uk.

many artists to try it. Yet the concept of layers wasn't unique to *Photoshop*. HSC – later to become MetaCreations – was concurrently developing *Live Picture*, an image-editing app including just such a facility. While an excellent program in its own right, *Live Picture* was vastly overpriced on its launch, leaving *Photoshop 3.0* for both Mac and Windows to clean up.

Nothing in later versions quite matched the layers feature for its impact, but there have nonetheless been significant changes. Version 5 introduced colour management and the History palette, with its extra 'non-linear history' behaviour, which certainly opened up whole new creative possibilities. A major update, version 5.5, bundled Adobe's package *ImageReady* in an entirely new iteration, giving *Photoshop* excellent Web-specific features. Layer styles and improved text handling popped up in version 6, and the Healing brush in version 7.

Today and tomorrow
Surprisingly given the age and market leading position of the application, Adobe continues to come up with new features for *Photoshop*. With *Photoshop* now part of the rebranded and remarketed *Creative Suite 2*, Adobe appears to be currently emphasising interoperability through the likes of Bridge.

But the program can't and won't stand still. For one thing, it faces much greater competition from a host of rivals, many of which claim to offer *Photoshop's* power without the price. Lower-cost apps aimed at the amateur or home enthusiast, such as *Paint Shop Pro* on Windows, have had many years to learn from *Photoshop*. Adobe's solution was to join them, launching the budget priced and feature-reduced but still immensely powerful *Photoshop Elements* – which itself has now reached version 4.

And the future? Unsurprisingly, Adobe isn't telling. *Photoshop* is the jewel in its crown and its development is closely guarded. But there have been hints. Bryan Lamkin, now Senior Vice President of Digital Imaging and Digital Video, speculated earlier this year on a true 64-bit version of the application, and perhaps support for Apple's CoreImage technology, which would bring enormous speed improvements. Rumours that Illustrator will merge with *Photoshop* have also abounded for years.

Whatever happens, it's likely that Thomas Knoll will be involved in some way. Although not directly concerned with *Photoshop* these days, he still keeps his hand in, recently developing the Adobe Camera Raw plug-in and posting occasionally to the Adobe forums.

His brother still works at ILM too: appropriately enough, he was Visual Effects Supervisor on all three of the new *Star Wars* films. Without the original *Star Wars*, there would have been no *Photoshop*; and with no *Photoshop*, your job, this magazine and the entire graphics design industry would be very different from how they are today. ca-p

[w] www.adobe.co.uk

Win Photoshop CS2!

A copy of the latest version of *Photoshop*, worth £523, could be yours...

If there's any tool in the designer's armoury that deserves to be called 'indispensable', it's *Photoshop*. Now you have the chance to win a copy of the very latest version, *CS2*, courtesy of Adobe Systems.

As you'll see from this issue, *Photoshop* has steadily grown and evolved, adding new features and functions with every version. Just when you think Adobe couldn't possibly improve upon perfection, a new version delivers a new tool that suddenly becomes your all-time favourite.

New features

Revolutionary new features in *Photoshop CS2* include Vanishing Point, which enables you to effortlessly clone, paint and transform with tools that automatically adjust to the visual perspective of your images. It'll cut hours off those precision design and photo retouching tasks. The new Image Warp means you can fold, stretch, pull, twist and wrap any graphic right on the canvas.

For photographers, *Photoshop CS2* offers Advanced Noise Reduction, Optical Lens Correction and 32-bit High Dynamic Range (HDR), as well as One-Click Red-Eye Correction, Smart Sharpen and the new Spot Healing Brush.

Designers will love the ability to select and control objects with Multiple Layer Control and Smart Guides, as well as the non-destructive editing of Smart Objects, which mean you can scale, rotate and warp as much as you like with complete quality preservation. The new WYSIWYG Font Menu makes finding the right typeface a snap, and the new Task-based Presets and Customisable Menus give you the tools you need right where you need them. With enhanced 16-bit editing, even more filters, such as Liquify, are now available for use in 16-bit images. And to find more images, you can now access thousands of professional images directly with Adobe Stock Photos.

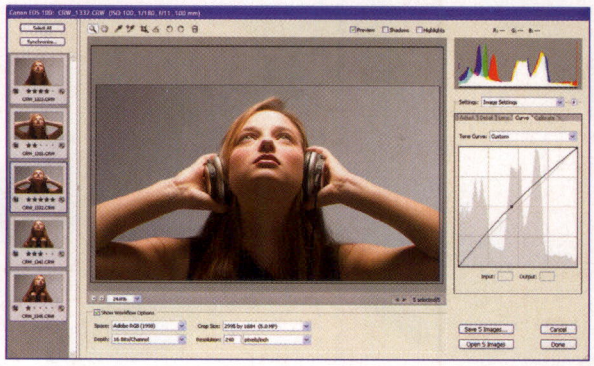
For your chance to win a copy of Adobe *Photoshop CS2*, just send your answer to the question below on a postcard to: ***Photoshop CS2* Competition, *Computer Arts Projects*, 30 Monmouth Street, Bath BA1 2BW.** Alternatively, enter at **[w] www.computerarts.co.uk/competitions**

The question

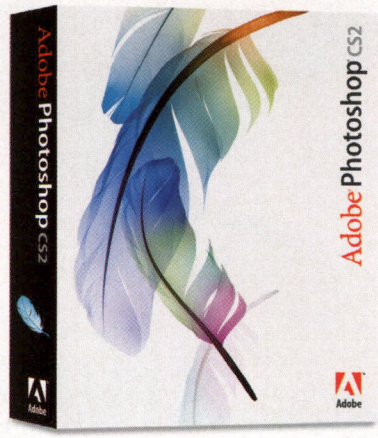
Which new tool in *Photoshop CS2* enables you to paint, clone and transform in perspective?

The rules

Closing date is Thursday 12 January 2006. Employees of Adobe Systems or Future plc, their agents and their families, are not eligible to enter. Multiple entries will not be accepted. There is no cash alternative, the editor's decision is final and no correspondence will be entered into. If you are entering by post and do not wish any of the companies involved in this competition to contact you with carefully selected offers relevant to your interests, please indicate this on your entry. We will not pass your details on to third parties. ca-p



Photoshop CS2 is bursting with enhancements and exciting new features.



This beautiful collage of birds was created as an advertorial piece for Vision Express.

[w] www.debutart.com

Sarah Howell

Profile

"It's sexy figurative post-pop art with a bit of wild inappropriate colour thrown in..." If that's what she does with words, just see what illustrator Sarah Howell can do with images...

Australian-born Sarah Howell's intricate and elegant work may be spotted on the latest CD covers or invitations in the fashion world, but her roots are firmly in fine art. "I have always wanted to be an artist, specifically a painter," admits Sarah, who studied Fine Art at the University of New South Wales in Sydney. "I established foundations in life drawing and oil painting as it's important to have the basics nailed before you try and mess with them."

However, it was ambition that led Sarah to make a U-turn and fly halfway across the world. "When I realised it was a slim chance that I would become the next Peter Blake, I came to London." While Sydney is bursting with creatives, Sarah found that the British capital offered more opportunities. "There isn't enough industry back home to support magazines and other creative outlets for illustrators. I love living in London as there is so much that you can do, the scene is massive and it's easy to spill over into Europe and America." Sarah's work has indeed appeared in magazines and on billboards worldwide for the likes of VH1, *Maxim* and EMI.

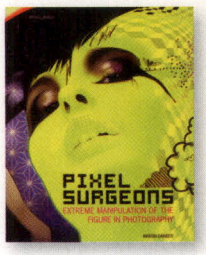
Back to school

A brief course at St Martin's introduced Sarah to the computer skills that would help her on the way to becoming a successful illustrator. "I had to seriously bluff as I didn't know how to turn a computer on. In the first

Sarah Howell and some of the work that inspires her.

"I love living in London... the scene is massive and it's easy to spill over into Europe and America"

Right: This four-part series of large window posters was illustrated for ultra-trendy Dutch shoe store Invito.



Above: Sarah's cover artwork for the book *Pixel Surgeons: Extreme Manipulation of the Figure in Photography*.

Below: Sarah's highly fashionable style was called upon to illustrate teen pop sensations McFly's album *Wonderland*. She illustrated the band portraits for the sleeve and the cover. She has also designed album covers for Jamelia.

class, the lecturer asked all PC users to go to one side of the room and the Mac users to the other. I had no freaking idea so I just sat on the Mac side." Once introduced to *Photoshop*, Sarah saw its potential. "I realised that not everything had to look CGI, which aesthetically isn't in keeping with my style. *Photoshop* is just like any other tool: you can do with it what you want."

It didn't take Sarah long to get established as a freelance illustrator and she soon dumped the day job. After signing with a handful of agencies, she is now represented by well-known heralds of digital art, Debut Art. "I've landed on my feet at Debut: they're amazing, very visionary." While she spends a lot of time browsing magazines, haranguing art directors and sending emails to design companies (she is a self-confessed stalker), Sarah has never questioned the importance of illustration agencies. "Getting a good agent is the key to constant work. Some people won't even look at your folio without an agent."

She's in fashion

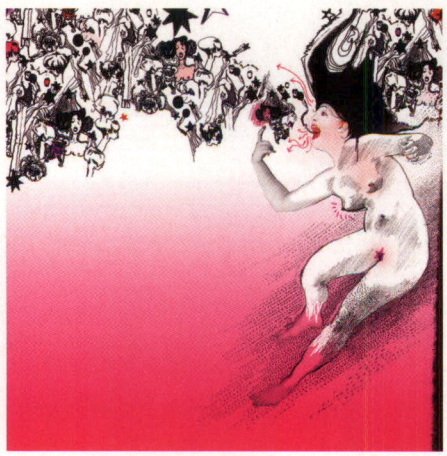
Sarah's illustrative style is both striking and of the moment: a playful manipulation of well-shot photography with sketched, colourful organic shapes. Sarah herself describes it as "sexy figurative post-pop art with a bit of wild inappropriate colour thrown in for good measure." Figures certainly feature predominantly across her portfolio, which is one of the reasons her style has been embraced by fashion labels looking to promote their lines. She was commissioned by surf chic label Voodoo Dolls to design the invitation to the launch of its new range by designer Luella Bartley. Her own interest in clothes and fashion means it's a successful partnership. "I prefer to depict humans and bodies, so it's natural that the commissions I receive are often fashion based. My work is full of colour, which also works for that sphere, and I'm kind of obsessed with pattern and textiles. Oh, and I love shopping, so that's like research really."

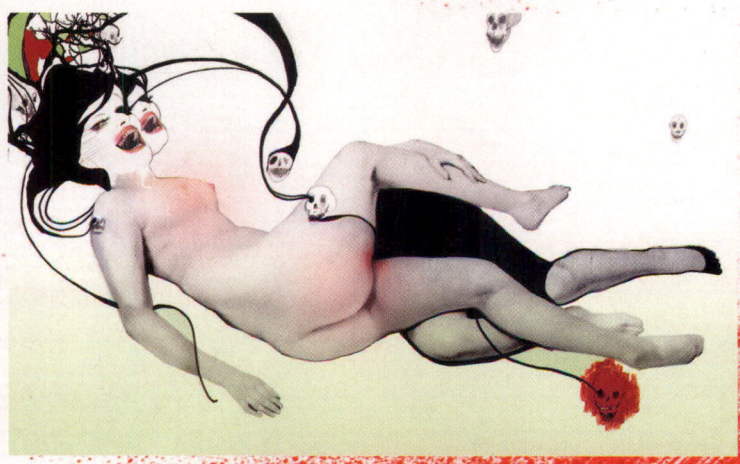
While good photography is essential to great illustration (see 'Shoot it yourself'), the colours and shapes Sarah uses for her intricate collages comprise the immediate attraction of her work. "I'm very interested in contradictions and always feel the urge to put two colours together that really shouldn't be there or mix textures that would normally be jarring." But her style hasn't always been this clear cut. "When I started out, I used to lose commissions because I had about three different styles. Clients would think I was a bit of a loose cannon creatively and might pull something out of the bag that was not like my book." She's since learned the importance of finding a style that works and being faithful to it while taking care to evolve and steer clear of a creative rut.

Personal extremes

While her commercial work shows polished unpredictability, her personal work is even more surprising. Without the bounds of a commission, Sarah often goes back to the paintbrush and creates more traditional works of art in addition to her *Photoshop* pieces. But it's content where her personal illustrations differ most. "I tend to go darker and stranger than my commercial work simply because I can. No one wants to see a strange, skinned anatomical figure with a top hat in their advert or editorial, so I can really push the boat out."

Sarah is working towards a solo exhibition at the Coningsby Gallery, London, where some of this personal work, as well as her commercial pieces, will be on show in April 2006. She cites this as one of her most demanding projects. "Creating vast amounts of work is daunting with no art direction





Right: Sarah created this imagery to feature on an invitation to the opening of fashion label Voodoo Dolls' new line designed by Luella Bartley.

Far right: This bizarre illustration was for French magazine *Dedicate*'s Smile issue.

Left: This dynamic fashion piece was commissioned for leading men's magazine *Maxim*.

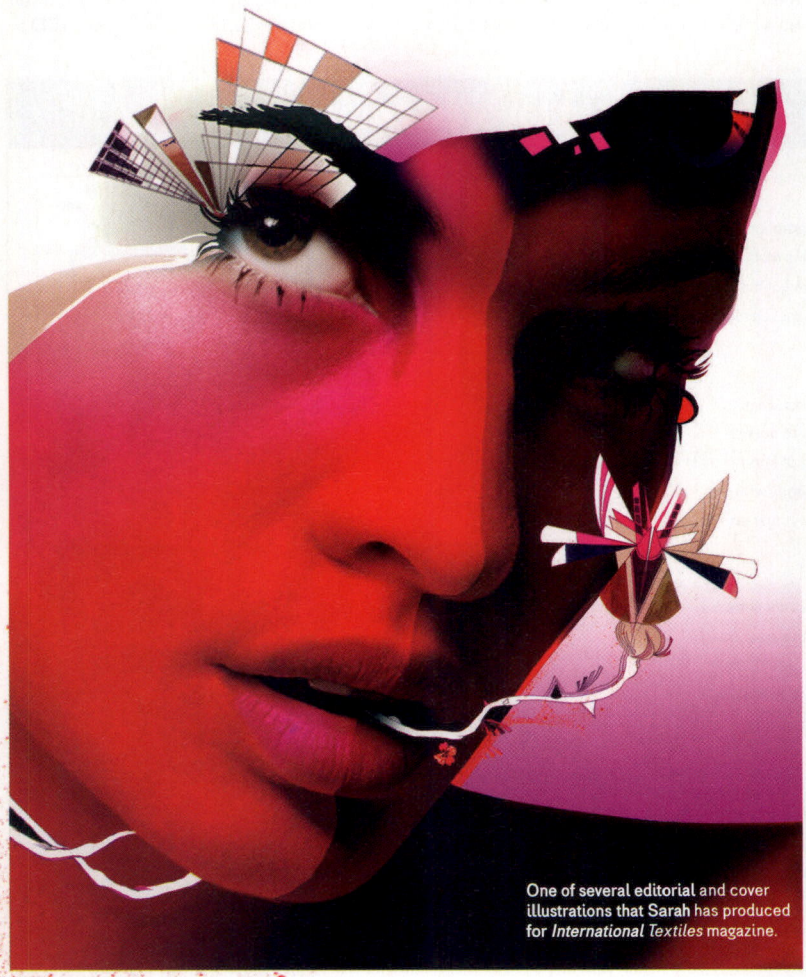
Right: Sarah subtly enhanced a portrait of Hispanic singer Alex Cartaña on the cover of her latest single.

from anyone and only yourself to give feedback. It's very challenging but exciting."

In her commercial work, Sarah's main goal, in addition to fulfilling the brief, is to achieve a piece of art that she could happily look at again and again. "I have to be satisfied that it is in my style and not compromised for the commission." This ethos is applied to advertisements, posters, CD and book covers, promotional materials and editorial spreads.

So how does she begin the process? "I usually have a springboard from which to work, where a client has liked a specific image and says 'something like this'. I'm either provided with a product or band shot or I'll be involved in a photoshoot." Once armed with the photography, Sarah will head back to her studio and start the manipulation, collage and colouring process. "I do most of my work with paint and pencil then scan it into *Photoshop* so that it retains that messy 'real' quality. I guess my personal ethos is that if I can't draw or paint it in real life, I won't do it in *Photoshop*, so absolutely no filters."

Her work is heavily influenced by the likes of Peter Blake, Allen Jones, even Bauhaus – artists that have used rough cut collage and cut-and-paste techniques to great effect. Sarah uses photography on top of photography to create textures as well as



One of several editorial and cover illustrations that Sarah has produced for *International Textiles* magazine.

Shoot it yourself

Despite her work featuring a great deal of photography, Sarah herself doesn't shoot it, preferring to work with professionals. Over the course of her career she's built up a network of photographers, make-up artists and models who can be called upon to star in her shoots. Commissions which include a tailor-made shoot are a luxury, and one that Sarah relishes: "I can get a good foundation for the drawing. I visualise it in my head and then get the team in to make it work. Things can often evolve to create other ideas and everyone bounces off each other, which is fab." She has been known to organise shoots to add something new to her own portfolio and have the chance to work with new people. "I'm very lucky that I have worked with some very talented people and continue to work with them."

To get the team together, Sarah starts with the photographer. Someone she has worked with previously or that she has contacted through their agency. "Once they're booked, things start to fall into place. They might know a hair stylist who recommends a make-up artist and it goes from there." Choosing models can be a more difficult job. "You see their book and then in casting they often look completely different."

Sarah's top five tips for a successful shoot are:

1. Contact all the agents that represent the people you want to work with or just contact them personally regarding a test shoot.
2. Arrange for everyone to have a meeting and brainstorm about the feeling and structure of the shoot – studio or location, mood, season, etc.
3. At the same meeting, sort the technical things – how many shots, any changes and schedule.
4. Next, contact model agencies to see their cards or look on their websites and choose the faces that are right for the shoot. Then book them.
5. Finally remember that a photoshoot is never one person's vision and that's why they are so fun. Relax!

This exciting piece was part of a commission for music channel VH1 and involved a big shoot. "This was the craziest job as I had four days to get the shoot and illustration done. They needed a party scene – glamorous, debauched and excessive."

Right and below: Sarah's personal work differs quite dramatically from her commercial creations. "I tend to go darker, odder, stranger than my commercial work simply because I can."

adding her own sketches. "I start by adding layers of scanned effects, washes and swirls of acrylic. The next stage is to swirl and smudge the clothing or other elements and extend some areas through paint and pattern so that the overall composition is beautiful. I then add delicate details, erase areas that hamper the flow and add touches like paint sprays and eyelashes." A distinctly unscientific process, but one she wields with skill despite never quite knowing where it will take her. "I just love it when things aren't perfect, I always forget to Despeckle and have never used a mask in my life."

Sarah is careful to step back and evaluate the finished product before sending it off. "I'm terrible when it comes to cleaning up work, but printing the finished image onto gloss paper really helps. You can clearly see crappy bits and colours that don't match well. It's a horrible feeling when you see your finished work and there is a really obvious error. The first time I saw my work really big was a Jamelia campaign and I was amazed that no one else saw all the mistakes!"

But it's the irregularities and characteristic flaws that Sarah admires in her contemporaries, including graphic designer Hort ("that collage work is just so bizarre and truly unique") and Jim Stoten ("his stuff is so odd, delicate and decorative"). She concludes: "I admire work that is unique and has a sense of being precious and real. Work that looks like that artist has really put their heart into it and you can see all the intricacies and flaws." ca-p

Following fashion: from photoshoot to layered composition

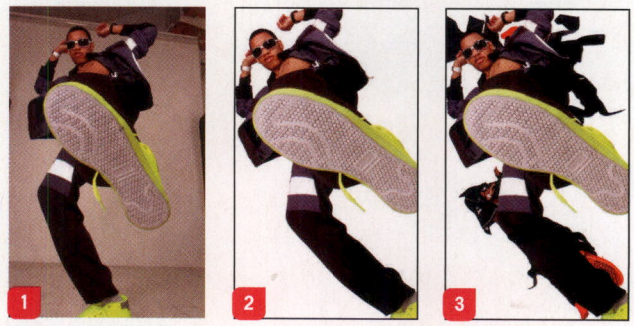
Sarah Howell takes us through the creation of a fashion project...

1. "The original shot was by one of my favourite photographers, Robert Astley Spark. I love working on his pieces as his motion work is always beautiful and pinpoint clear. On this shoot he got the model to dance and jump around to create extreme body shapes. It took us hours to pick the best shots!"

2. "Here, I have pulled out the background so that the figure is striking and bold without the clutter of the set. I prefer to not use feathering so I can capture that cut-and-paste feeling of Pop Art that I love. I fiddle around with the composition until I'm happy with the base. It's important for me to get this part right or everything else on top will look wrong."

3. "This story was all about dynamics and creating abstract patterns from movement and dance. I have cut and pasted all the other images that Rob has taken to create strange shapes and forms within the composition. I took a lot of inspiration from textiles and mandalas. The image had to flow across the page but retain a flat quality, hence I ignored perspective."

4. "This is the finished image, where I've layered all my drawing and hand-drawn patterns inspired by the treads of the trainers we were shooting. At this stage I just keep experimenting and layering until the image is finished. When I'm happy with the result I go over the whole thing pixel by pixel and clean it up, ready for the editorial."



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Tutorial

[image] Y.O.L.O. **[e]** yolo@youonlyliveonce.co.uk

Texture, wrap, distort, displace!

Using displacement maps in *Photoshop* can add realism and texture to your work. Master them and some stunning effects become easy...

Creating realistic visuals by applying graphics to a photograph is an everyday job for designers: for example, putting a logo on a photograph of a T-shirt. Just using layer settings such as Multiply is a step in the right direction, but this doesn't take into account the ripples of the T-shirt.

The often overlooked Displace filter in *Photoshop* has been around for a long time now and will help you out with things like ripples. It works by using a separate *Photoshop* file as a texture map. When applied, texture is taken from the texture map and used like a surface for your target image to sit on, which gives a 3D effect. It enables you to place the logo on the T-shirt so it sits correctly on the ripples.

The Displace filter works by moving pixels on your target image according to the light and dark colours on the displacement map. Light and dark areas cause movements in opposite directions so your image becomes distorted, sitting on contours of the displacement map. In the following tutorial, we show you how to work with various different displacement maps on an image of a woman.

Expertise provided by Y.O.L.O. **[e]** yolo@youonlyliveonce.co.uk

You'll find a source image for this tutorial on the *Computer Arts Projects* disc 78 in the DiscContent\Tutorials\Tutorial Files\Displacement maps folder.

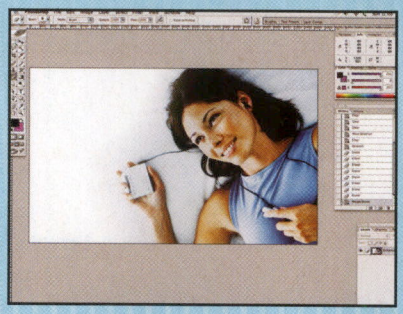
Filte
FilterDistortDisplace

Part 1: Learning the basics

Find out how to start working with *Photoshop's* default displacement maps...

Adding a watermark

There are times when you need to protect your images from unauthorised use. Adding a watermark with the Displace filter is easy and it takes a lot of work to erase it from the image. Type your name or bring your logo into a greyscale *Photoshop* document. Then use the Layer Style window to bevel and emboss it. Save the file as a flattened PSD, which you can use as a tiled displacement map to create a watermark. You can then make this process a *Photoshop* action so it's even quicker to apply.



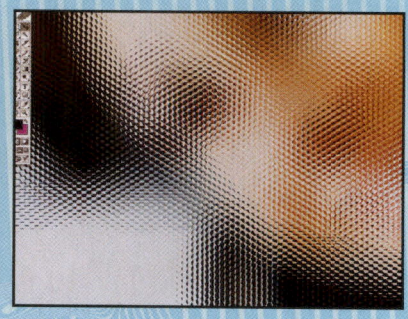
1 Open *Photoshop* and create a new document at 480x290mm, 300dpi and RGB. Now open the 'musiclady' image from the disc and paste it into the document. Select Edit>Transform>Rotate and position the image as shown above. Save the image.

2 Flatten the image (Layer>Flatten). Go to Filter>Distort>Displace, which brings up the Displace settings window. Set the Horizontal and Vertical Scales to 25, the Displacement Map to Tile, and the Undefined Areas to 'Repeat Edge Pixels'. Then click OK.

3 The Displace filter enables you to take textures from secondary PSD files. Clicking OK in the previous step brings up a file browser at the location of *Photoshop's* built-in displacement maps, located in the Plug-Ins folder in Displacement Maps. Pick 'Random strokes (25%)' and click OK.

4 The filter does its work and applies a tiled texture to the image. The Displace filter can be used like this to help add texture to flat areas of colour when creating stone or gravel effects. Undo the filter by going to File>Undo Displace and try the Displace filter again but with different settings.

5 Bring up the Displace filter again (Filter> Distort>Displace). Set the horizontal and verticals to 100. Choose the same displacement map as before – 'Random strokes (25%)' – and click OK. This gives a much more distorted image, as if the woman is behind a sheet of safety glass.



6 Try out some of the other built-in *Photoshop* displacement maps on the image and play around with the settings to better understand how they work. There's an element of trial and error when using displacement maps, so it's good to get to grips with them.

Part 2: Creating your own maps

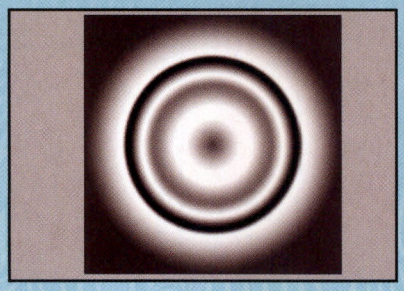
Default textures are all right, but it's better to make your own...

1 You can use either a tiled displacement map or one that's the same size and resolution as your target image. To create a tiled map, first create a new document in *Photoshop* at 50x50mm, 300dpi and Greyscale.

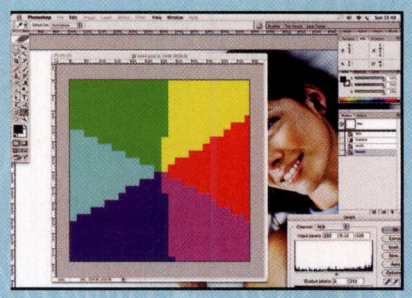
2 Make a circle selection with the Marquee tool and fill it with a circular gradient. Save the file as a *Photoshop* document into the Displacement Maps folder. Use the Displace filter on the image again and select the displacement map you've just made. The resulting image is heavily distorted.

3 Open the new displacement map and double-click its background layer icon on the Layers palette. Double-click it again to bring up the layer style window. Check Gradient Overlay and set its style to Radial. Choose a gradient or make your own and click OK. Flatten and save the file and use it to displace your image.

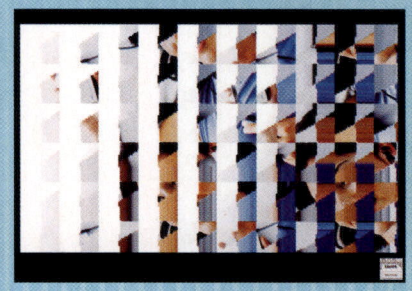
Creating your own maps continued...



4 The tonal range in this displacement map gives us smooth 'bumps' on the target image. The lightest areas become high points and the darkest become the low points – smoother blends between colours produce more natural results.



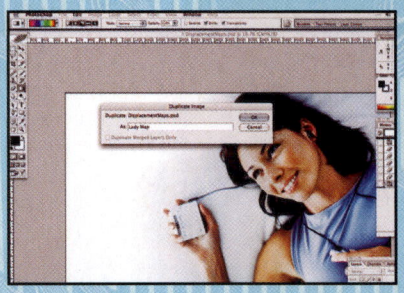
5 Make a new document in *Photoshop* at 50x50mm, 300dpi, RGB. Create an angled spectrum gradient, then use the Mosaic filter and adjust the levels to make it blocky. Save it as a flattened *Photoshop* document.



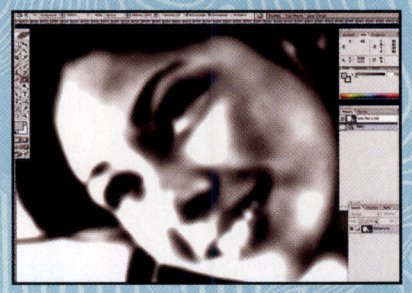
6 Now go back to your musiclady image (Filter>Distort>Displace). Set the Horizontal to the maximum of 999 and the Vertical to the minimum of –999, select Tile and 'Repeat Edge Pixels'. This gives a distorted but interesting image.

Part 3: Creative use of displacement maps

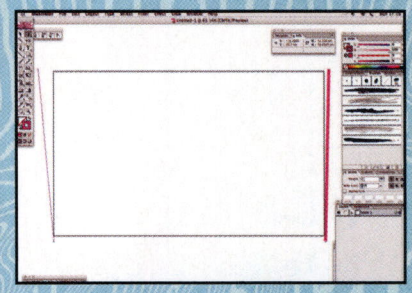
Now that you know how to create them, here's how to use displacement maps in a specific way...



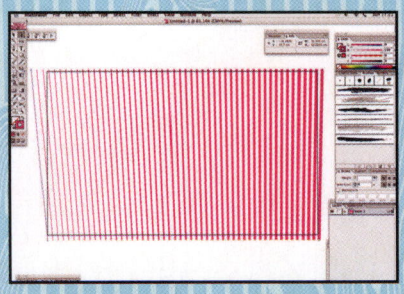
1 Revert to the last-saved musiclady image (File>Revert). Then duplicate the file (Image>Duplicate). Name the file Lady Map then save it.



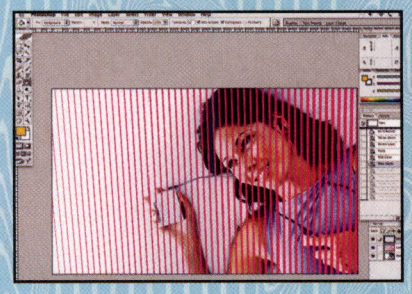
2 Change the Lady Map file to greyscale (Mode>Greyscale) then select Image>Adjustments>Brightness/Contrast and adjust its Brightness to +10 and Contrast to +35. Then Gaussian Blur it by 15 pixels and adjust the levels to get a good tonal range on the image.



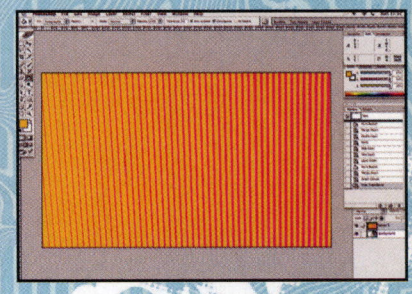
3 Next, create a blend of lines in *Illustrator*. Create a new CMYK document at 480x290mm and draw a line at the left and right edges. Make the thickness of the line on the left 1pt and the line on the right 20pt. Rotate them so they're not parallel.



4 Select both lines and go to Object>Blend>Blend Options. Set the blend type to Specified Steps and the amount to 50. Click OK. Then go to Object>Blend>Make to create a blend between the two lines.



5 Copy the blended lines and paste them into the main coloured image in *Photoshop*. Resize it so it covers the whole area of the image.

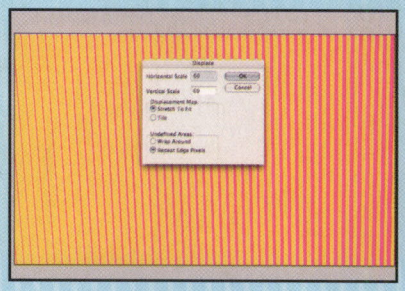


6 Create a new layer under the pink lines (Layer>New>Layer) and colour it a warm yellow with the Paint Bucket tool. Select the pink lines layer and go to Layer>Merge Down to merge it with the yellow layer.

Creative use of displacement maps continued...

Patterns for brushes

Simple displacement maps can also be used as effective brush textures. Create a simple greyscale displacement map on a square white background. Select All and then go to Edit>Define Brush Preset. Name the brush in the next window and click OK. This pattern is now available as a brush in your brushes list.



7 Select the pink and yellow lines layer and go to Filter>Distort>Displace. Set the Horizontal and Vertical Scales to 70, the Displacement Map to 'Stretch To Fit' (because it's the same size it won't distort) and set Undefined Areas to 'Repeat Edge Pixels'. Then click OK

8 Select the Lady Map file you made earlier and click OK. You'll see how the woman's contours are put on to the pink and yellow lines.

9 Change the layer blending mode of the distorted lines to Lighten. Then make the colour of the lines softer by using Image> Adjustments>Hue/Saturation.

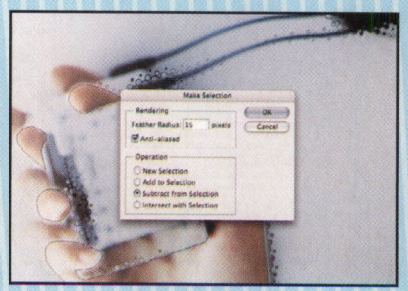
Part 4: Advanced treatments

We show you how to cope with more complicated displacement maps...

1 Now we're going to bring back some of the features of the face. Turn off the distorted lines layer. With the Pen tool set to Paths, draw paths around the eyes, mouth and nostril. Create a path for her face, hands and arms as well.

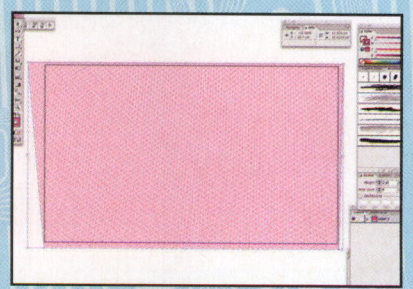
2 Open the blurred greyscale lady image that you made earlier. Go to Filter>Pixelate>Colour Halftone. Set the Max Rad to 20 and set all the angles to 45. Then blur the halftoned image by four pixels. Save the image as a *Photoshop* document.

3 Go back to the main image and duplicate it (Image>Duplicate). Then apply the halftoned image as a displacement map to it. Enter 60 for the Horizontal and Verticals, select 'Stretch To Fit' and 'Repeat Edge Pixels'.



4 Select the paths in the Layers palette, click the small triangle on the top-left corner and choose 'Make Selection' from the dropdown list. Set the Feather Radius to 15 and press Delete to delete the section and show the unfiltered image underneath. Delete all the pathed areas in this way.

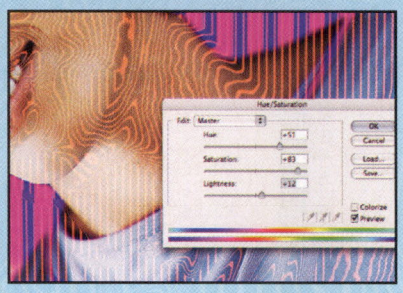
5 Use the Eraser on any messy bits that remain, then turn the distorted lines layer back on and set its layer blend mode to Lighten. Delete the face area from the layer using the path you made earlier.



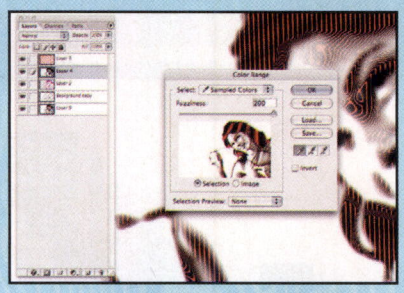
6 Go back to your *Illustrator* document with the blended lines. Change the weight of the blended lines to 2pt and change the blend steps to 200. Paste this onto your *Photoshop* document as you've done before.

Part 5: Distorting lines

Make your blended lines part of your final image...



1 As with the thicker lines before, use the blurred greyscale image as a displacement map to distort the fine lines. Change the colour of them with Image>Adjustments>Hue/Saturation. Then set the layer to Hard Light.



2 Open the greyscale image that you've been using as a displacement map and copy and paste it onto your main document. Now go to Select>Colour Range. Set the Fuzziness to 200 and click the white of the image with the Eyedropper.

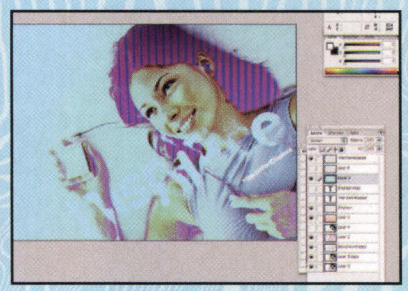
3 Select the layer with the pink lines and press Delete, and then set it to Multiply. Select the layer with the finer lines and set it to Screen. Then use the Eraser tool to rub away some of the lines from her hair.

Part 6: Adding type

Finally, we show you how to use displacement maps with type...

1 Using type with displacement maps can be very effective. Position type over the vest, render it with Layer>Rasterise>Type, then apply a displacement map with Horizontal and Vertical set to 7 and select Stretch To Fit. Use the greyscale lady image as the map.

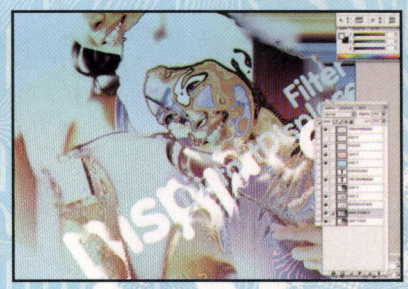
2 Next position a large 'Displace' heading at an angle over the image and rasterise it.



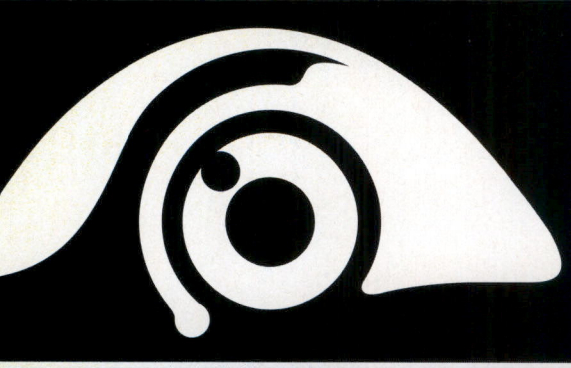
3 Now apply the displacement map with the halftone effect on it. Play around with the horizontal and vertical settings for some striking results – we went for 100 on each here.

4 The image needs to be knocked back and made more uniform. Create a new layer and fill it with a light blue and set it to Darken. Select the layers with type and fine red lines and move them above the blue layer. Adjust the Hue/Saturation of the layer with the pink stripes so it looks more natural. Use the Eraser to clear some of the hair.

5 Select and duplicate the bottom layer (the main image) of your document. Go into Quick Mask mode by pressing 'Q' and make a gradient at the bottom of the image that goes up about a third of the image. Press 'Q' again to exit the Quick Mask mode and the gradient has become a selection.

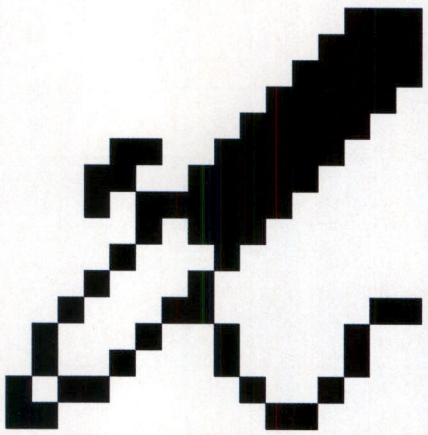
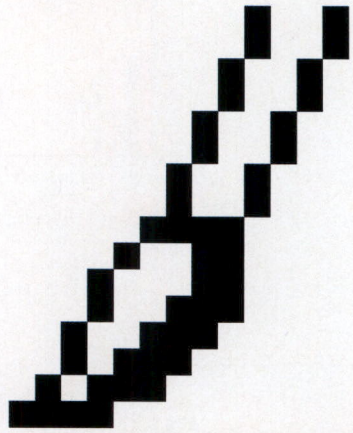
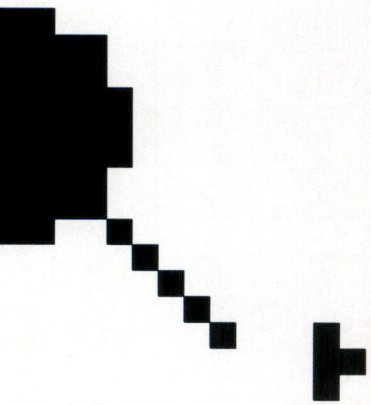
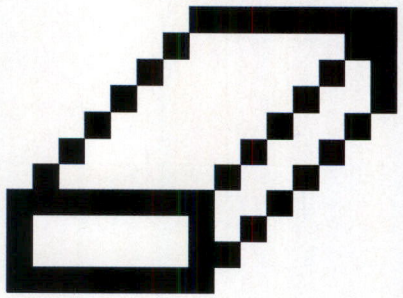
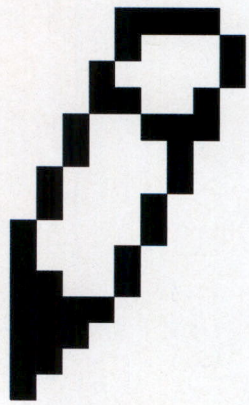
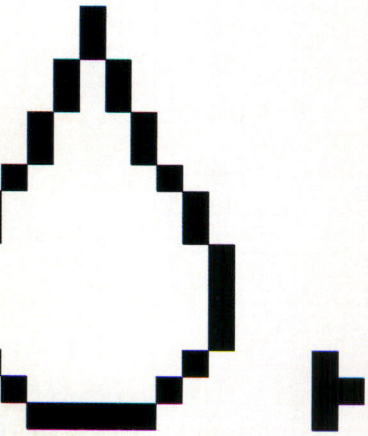
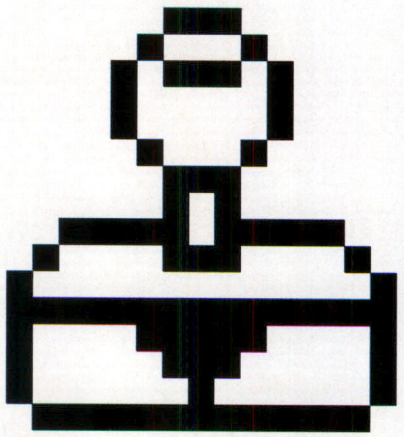


6 Invert the selection (Select>Inverse). Now apply a Displace filter to the duplicated image. Set the Horizontal and Verticals to 999, select Tile and 'Repeat Edge Pixels'. Click OK to get a very distorted image. Set the layer to Overlay at 75 per cent opacity and you're done. ca-p



15 years of PHOTOSHOP

You've come to know and love them, but have you ever met them close up...?

Paths Jpg Style Levels Contrast
Channels Paths Jpg Style Levels
Jpg Style Levels Contrast
Paths Jpg Style Levels

Explore Photoshop CS2

Discover the new features in *Photoshop CS2* for digital designers seeking slicker workflow and better tools...

Described by Adobe as "breaking new ground as the benchmark of digital imaging excellence", *Photoshop CS2* certainly turned a few heads when launched in April this year. Photographers and videographers were catered for with a host of new image-manipulation tools, while designers were offered workflow improvements and various new gadgets with which to warp their creations. But are the additions and enhancements truly worth the price of the upgrade, or is sticking with *CS*, or even version 7.0, the sensible option for the digital designer?

On loading *CS2*, it doesn't appear radically different from *CS*, which is comforting if you're happy with its predecessor's layout. However, the menus have some intriguing additions, such as the option to convert images to 32 bits per channel, although doing so greys out a good many other entries. The appearance of the palettes is also slightly different, lacking the link icons, but in this version you can Shift-click to select multiple layers. In fact, layer management is subject to numerous improvements, as we'll see later.

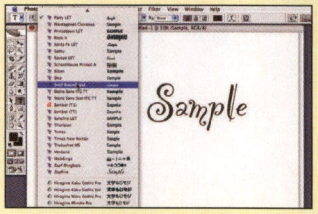
The most obvious change is that when you click on the File Browser icon, a program called Adobe Bridge launches. This is an image-management application that integrates with the entire *Creative Suite*, so *Photoshop* users who also have need of *Illustrator CS2*, *InDesign CS2* and *GoLive CS2* can keep tabs on their assets from a single app, and drag and drop images between them. It's clear that Adobe had workflow high on its agenda when developing *Photoshop CS2*, and we'll take a closer look at what's been implemented later in this feature. It's also clear >

[illustration] Chuck Anderson **[w]** www.nopattern.com

Four key features

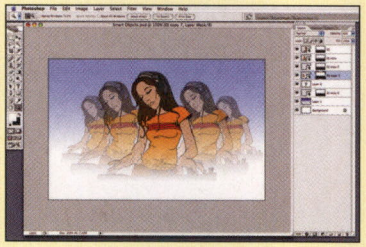
Among the many new features available in *CS2*, here's what designers are likely to appreciate the most...

WYSIWYG font menu



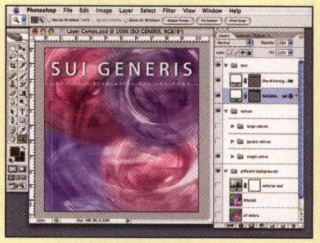
In days gone by, choosing a font in *Photoshop* involved either trial and error or learning the names and styles of the fonts available. In *CS2*, life is made much easier thanks to previews of each entry in the font menu. Admittedly, each preview is shown only as the word 'Sample', but it's enough to help you judge the style of the font.

Smart Objects



You can now perform non-destructive transformations of single or multi-layered images via Smart Objects. The original image file, or files, can be embedded into a Smart Object, which will even recognise *Illustrator* vector artwork, and scale it, alter opacity, apply blend modes and warps without touching the original data.

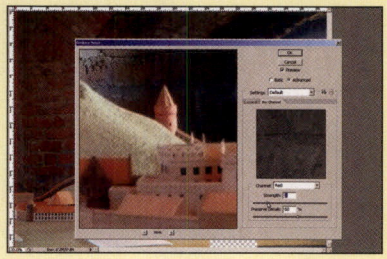
Smart Guides



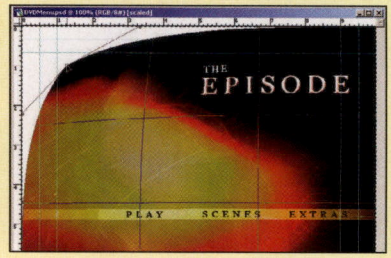
Photoshop has long offered users the facility to align elements with guides, but they're smarter in *Creative Suite 2*. Multiple layers can be selected, aligned, grouped and moved simultaneously, while Smart Guides appear automatically to help you line things up perfectly, snapping to borders or to the centre of the document canvas.

Adobe Bridge

The old *Photoshop* File Browser has migrated to a stand-alone application in the shape of Adobe Bridge, an image-management suite featuring the means to browse and sort media files, rank them and add keywords, and examine any metadata that may be embedded. There's even a link to the online Adobe Stock Photos service, should you need images.



Images captured at high ISO settings, or from dodgy scanners, can be cleaned up in *Photoshop CS2* with the new Reduce Noise filter.



Bend your artwork in bizarre ways, mapping it onto backgrounds without resorting to 3D rendering packages. *CS2*'s new Image Warp makes it possible.

that the developers had some novel ideas for new tools, many of which will be of interest to photographers, but here we'll concentrate on those that the designer will find the most useful.

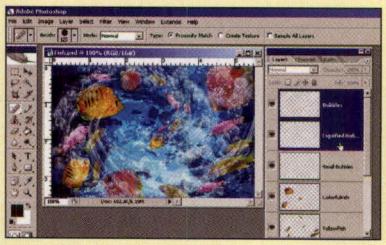
First off, aligning image components is made easier with Smart Guides, which appear when they're needed so as to line up elements on multiple layers, but can be switched off if they're distracting. As mentioned, multiple layers can be selected by Shift-clicking in the Layers palette – something you couldn't do in *CS* or earlier versions – which makes working with multi-layered compositions a good deal easier. There's yet more enhanced control of layers via Smart Objects. *Photoshop* images and vector graphics from *Illustrator CS2* can be embedded into a Smart Object and scaled, rotated and warped simultaneously, the data in the original files remaining unaffected. They can also operate like *Illustrator*'s symbols – when you edit one linked copy, all the other linked copies will update.

New features

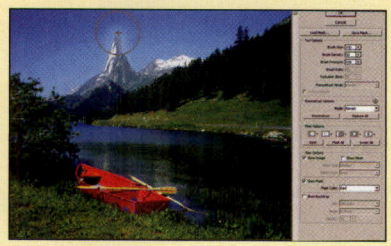
If you've ever had to map a piece of design work onto, say, a cylinder, then Image Warp will be of interest. Unlike the other Transform tools, it enables you to bend artwork into shape by dragging control points on a warp grid. If used with Smart Objects, the warped item remains editable and so could be a real time-saver. Another new transform-related tool is Vanishing Point, with which it's possible to take an image element and shift it across a grid that matches the perspective of the background image. The selection will automatically change shape in perspective.

If you're working on a composition comprising images shot with an old digital camera, or one set to high ISO sensitivity, the new Reduce Noise option will clean things up. It addresses noise issues on each colour channel, so you can track down the noisiest and correct just the one channel, and it also has a function for correcting artefacts caused by excessive JPEG compression. A Spot Healing Brush has also been introduced for one-click removal of image elements. Where once the Clone Stamp, with its attendant Alt-clicking to set a source point, would be used to clean up a portrait or product shot, now all that's necessary is to set the brush size and click over the item to be removed, saving yet more time.

Should you have a collection of 16-bit images and need to apply such filters as Liquify or Lens Blur, there's no need to convert them to 8-bit in *CS2*. Many of the filters now support 16 bits per channel, offering extended dynamic range when editing. The font menu now features previews of each font type, which could be a time-saver, and the application and palette menus can be customised either to hide entries that you rarely use or to reposition those that are accessed a lot. There is more to *CS2*, including the facility to create animated GIFs in the new Animation palette, which saves having to open another

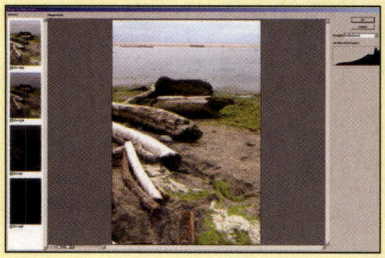


You can now Shift-click to select multiple layers in a composition, which makes managing image elements much easier than before.



Liquify is one of the many filters present in *Photoshop CS2* that are now able to cope with 16-bit image files.

Explore Photoshop CS2



Multiple images shot at various exposures can be merged to high-definition, 32-bit composites for incredible dynamic range.

program. And there's multi-image Camera RAW should you need to process a batch of images into PSDs, TIFFs, JPEGs or the new Digital Negative (DNG) file types, cropping, rotating and colour correcting as you go. However, as outlined earlier, Adobe has put much effort into enhancing the designer's workflow and key to that is Bridge.

Workflow wonders

Adobe Bridge offers facilities for sorting a media-file library, examining metadata, embedding keywords and more, as well as linking directly to many of *Photoshop*'s automated services. It integrates with *Photoshop* – it can be accessed via an icon in *Photoshop*'s interface – and it's possible to drag and drop images between the two programs, as well as *Illustrator CS2* and *InDesign CS2*. While many photographers find Bridge's Camera RAW handling indispensable, designers are doubtless appreciating multiple windows, by which images can be compared on multiple monitors, and easy access to stock images via the online Adobe Stock Photos service. The database, containing hundreds of thousands of images from leading stock agencies, is searchable by keyword, and low-res results can be downloaded and used for comping, while users in the USA can search for a photographer in their region via a directory service – handy for those design jobs requiring original photos.

Photoshop itself has become rather more adaptable, enabling you to create and save customised menus so as to cater

The windows have been mapped onto the side of the huts using *Photoshop CS2*'s new Vanishing Point function, which enables you to manipulate image elements in perspective.

Case study: Colin Smith

Colin is the holder of two Photoshop Guru awards, presented at the Photoshop World Convention in 2001 and 2002, for his illustration work. He has written much about the program, including the award-winning *New Masters of Photoshop* book. He also produces training CDs (**[w]** www.photoshopcd.com) and is involved with various websites, including the popular **[w]** www.photoshopcafe.com.

"Key features for designers start at integration between other programs in the *Creative Suite* through Smart Objects and Layer Comps," he says. "The more sexy features are Vanishing Point and Image Warp. These two features will allow us to bend and twist or images in ways that were not possible, or at best difficult, in the past."

Colin's workflow has been considerably enhanced by Bridge, helping him to arrange and manage his assets, and it's set to load as soon as he switches on his computer. There's also plenty of new goodies in *Photoshop* itself to keep him happy. "The ability to work on images has been greatly improved with features such as Smart Sharpen and Reduce Noise. Using Smart Objects, Layer Comps and the new layer features, I can knock out a design quicker and tidier than I could in the past."

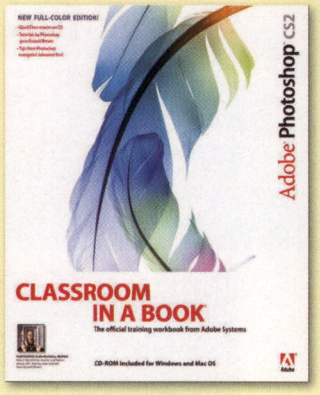
It's not all roses, however: "The print engine is all new, although I'm not convinced that it's much of an improvement because you still have to go through the printer's software to output and, if it's not done right, can produce some unexpected results. I suggest doing all the colour management in *Photoshop* and then turning it off on the printer."

See more of Colin's *Photoshop* designs and the other work in his portfolio at **[w]** www.pixeloverload.com.

Above: Colin created this piece for the book *New Masters of Photoshop*. The illustration was created completely in *Photoshop*, with no scans, photographs or 3D software used.

Below: More dazzling *Photoshop* work by Colin Smith, winner of Photoshop Guru awards in 2001 and 2002.

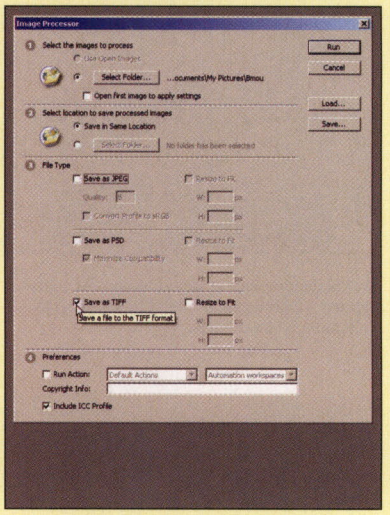
Further reading


NEW FULL-COLOR EDITION!
Adobe Photoshop CS2
CLASSROOM IN A BOOK
The official training workbook from Adobe Systems
CD-ROM included for Windows and Mac OS

Adobe Photoshop CS2 Classroom in a Book

If you want the authoritative guide to getting more from *Photoshop CS2*, Adobe has the book for you. It contains tutorials from the Adobe Creative Team, so you can be assured that the information is top notch. A CD featuring QuickTime tutorials accompanies the £35.99 ($49.99) publication, ISBN 0321321847.

The new Spot Healing Brush tool simplifies things when retouching images. Rather than press Alt to define a source point, click on the offending item.



Photoshop CS2 has a new Image Processor with which you can process multiple Camera RAW and other image file types.

for specific, task-based workflows. Custom keyboard shortcut layouts can also be set up ready for one-click access. When it comes to creating repetitive graphics, there are new automation functions to help out. Data can be imported from spreadsheets and databases, or defined in *CS2*, via the Variables function. For example, if you're putting together a series of Web graphics in which the background remains the same but the information changes, Variables enables you to import the data from another source and automatically generate the graphics. No programming knowledge is required.

When it comes to output, there's a new print engine that aims to take the guesswork out of getting consistent results on various devices, and a fully revised PDF engine that is compatible with *Acrobat 7.0*. However, one of the most important workflow issues is file size. As *Photoshop* documents become ever more busy with layers, the scratch disk gets hammered and the system starts to wheeze. Previously, *Photoshop* could only address 2GB of RAM, but now, provided you're using a Power Mac G5 running Mac OS X or a Windows XP 64-bit Edition OS running on 64-bit hardware, the program can address around 3.5GB of RAM, speeding workflow even more (and saving your poor hard disk).

Naturally, not every designer uses *Photoshop* for every job, and Adobe's strategy has been to improve integration between every element of *Creative Suite 2*. So let's see how the full-blown £1,000-plus ($1,199) family of products gets on.

All together now

Photoshop CS2 and Adobe Bridge both support Version Cue CS2, which is available exclusively or is supplied with *Creative Suite 2*. In essence, Version Cue assists collaborative working. If you're in a networked, workgroup environment, files can be shared via the system and the status of each can be monitored so that, for example, you don't save over someone else's work. Naming conventions go out of the window — Version Cue tracks the document even when you give it a name to suit your own preferences — and reminders are generated automatically when versions are updated or placed into layouts.

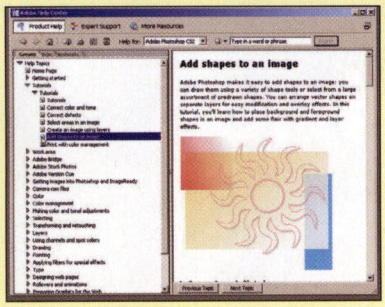
As mentioned, Bridge is at the hub of *Creative Suite 2*, offering the means to drag

Upgrading to Photoshop CS2

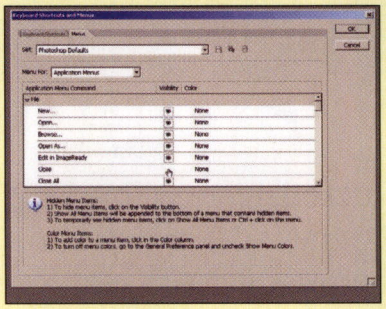
Mac and Windows versions are sold separately; prices apply to either

From	To	Price
Nothing	Photoshop CS2 Mac or Win	£522.87/$599
Photoshop CS, 7.0 or earlier	Photoshop CS2 Mac or Win	£143.99/$149

WIN your own copy of Photoshop CS2 for free! Turn to page 19!



The online help feature in *Photoshop CS2* has been given a new look and offers fast searching of local and online help resources.



Application menus, as well as workspaces, can be customised for specific job types and the arrangements saved for later use.

and drop files between the suite's various programs and providing access to online stock photography libraries, images from which can also be dragged in via Bridge's interface. Adobe's strategy here is to enable you to buy all your images at once, even if they are from more than one of the nine participating suppliers. Royalty-free and rights-managed stock is available, the latter of which is subject to negotiation on price.

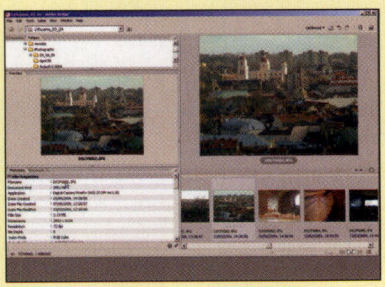
Integration between *Illustrator CS2* and *Photoshop CS2* has had a further boost with layer comp support, enabling you to control the visibility of layer comps in embedded and linked files, as well as *Photoshop* files opened directly in *Illustrator*, while *InDesign* can display *Photoshop* layers and layer comps, making experimentation with layout variations a lot slicker.

Consistency of colour between applications is ever important and Bridge is central to colour management. It offers the means to synchronise colour settings for every application in the suite so as to preserve CMYK values throughout, which is an important consideration for those aiming to use a four-colour process. Finally, Bridge offers a centralised file-search option so that folders of project files can be looked through and results previewed by you and the team without actually having to open the files themselves. The design of each program in *Creative Suite* is unified, so switching from one application to another will present you with a familiar interface.

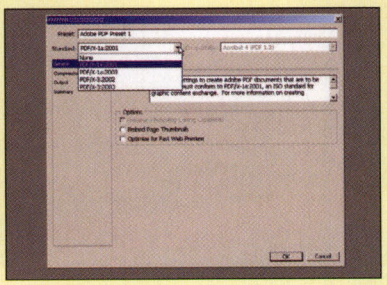
Creative Suite is available in Standard and Premium versions, the former featuring *Photoshop CS2, Illustrator CS2, InDesign CS2*, Version Cue CS2, Adobe Bridge and Adobe Stock Photos, while the latter throws in *GoLive CS2* and *Acrobat 7.0 Professional*.

Competitive advantage

Of course, whether or not you decide to follow the upgrade path for *Photoshop* alone, or indulge yourself in the full suite, depends on your needs as a designer. Some may feel that their existing copy of *Photoshop* has all the tools they need, while others, having examined the new features outlined here, may conclude that their creative potential and productivity could benefit. What is clear is that Adobe has come up with a package that, while not revolutionary, is a welcome evolution of what is already a great product. There are more additions that professional designers would like to see, and some lament about features that have fallen by the wayside, as you'll see elsewhere in this article. But if you have a registered version of *Photoshop* already on your system, the upgrade price is none too steep considering all the new design tools on offer. And in the competitive world of design, you can never have too many tools to hand. ca-p



Adobe Bridge features various layout types so you can choose the one that suits your workflow the best.



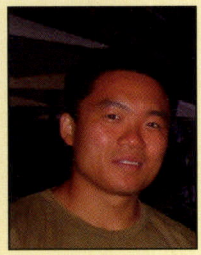
Customise settings for the new CS2 PDF engine, which is compatible with PDF1.6 and *Acrobat 7.0*.

Photoshop CS3?

Four leading *Photoshop* professionals suggest what they'd like to see introduced in the next version of the world's top digital-imaging package...

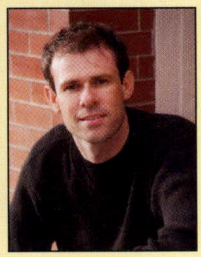
Diane Fenster
www.dianefenster.com

Photoshop Hall of Fame member Diane Fenster is already quite happy with the way that the software performs, although she does have some intriguing ideas on making it even more useful to her working day: "I'd really like to see *Photoshop* be able to make my coffee in the morning and then go out and show my work to prospective clients in the afternoon. Other than that, it does what I need to make my art."



Seung Ho Henrik Holmburg
http://henrik.cgcommunity.com

Henrik uses *Photoshop* for conceptual design and matte painting and has some ideas for additions to the software: "The way the colour picker works could be greatly improved by keeping it accessible at all times, not only when opened. What would also be useful is if the brush size could be controlled the way it works in Discreet's compositing software – you hold down a key and change the brush size by moving your mouse away from click point."



Colin Smith
www.pixeloverload.com

Colin has a few ideas that could improve *Photoshop*: "It would be neat if you could paste multiple images in Vanishing Point and see a warning dialog box for when you hit the Escape key. I would love to see a return of the link well in the Layers palette and the ability to make a Smart Object independent with a click. Finally, being able to hold down the Alt/Option key to bypass the filter gallery and apply an individual filter would be great."

Suzette Troche-Stapp
www.glitterguru.com

Suzette, aka The Glitterguru, received NAPP's Photoshop Guru award in 2001 and uses photographs in her designs. She sees integration as the next step forward: "I think one thing that would change the way we use our image capture and manipulation systems would be the integration of hardware and software. In my *CS3* dream you could photograph an image and have it appear in *Photoshop*. There you would be able to manipulate the histograms, levels, etc. Then you could have *Photoshop* automatically make the proper exposure and aperture changes back on the camera."

Tutorial

[illustration] Magictorch [w] www.magictorch.com

Warped vision

Tucked away within *CS2*'s Transform tool is the new Warp function. Make sure you find it, because it packs real *Photoshop* punch...

This tutorial concentrates on the new Image Warp tool in *Creative Suite 2*, a tool you probably never realised you wanted but soon won't be able to live without.

We're going to show you how to create an image using non-destructive techniques wherever possible, because it's always a good idea to keep things editable. This means using the new Smart Objects feature as well as trusty favourites such as layer masks and Adjustment Layers. We also reveal a few tips and tricks to give your images more oomph.

Our creation is a retro-futuristic shopping mall: a giant concrete temple to consumerism. Imagine a shopping centre in Huxley's *Brave New World* or Fritz Lang's *Metropolis* and you'll get the picture.

We begin with a very simple 3D render and use *Photoshop* to bring it to life, by mapping textures onto surfaces using the Image Warp tool. These techniques will help you to create fantasy or sci-fi style images with minimum reliance on 3D – the Image Warp tool is much more intuitive and hands-on than texture-mapping in 3D.

Once mastered, Image Warp provides a wealth of options for the *Photoshop* user. As well as enabling you to create fantasy images, it can be used for fiddly photo-retouching so you can map logos and text seamlessly onto difficult curved or undulating surfaces.

In addition to the elements used to create this image, we've included a complete version on the disc with all layers intact, so you can see more closely how we worked each step. >

Expertise provided by design collective Magictorch, [w] www.magictorch.com.

The files needed for this tutorial can be found on the *Computer Arts Projects* disc 78 in the DiscContent\Tutorials\Tutorial Files\Image Warp folder.

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Part 1: Setting the scene

Start your retro-futuristic image by setting up your document and layers…

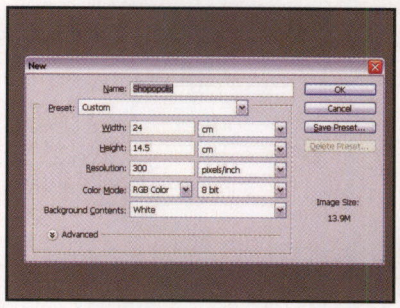
A note to Mac users

Keyboard shortcuts are listed in PC format first and Mac format second throughout this tutorial. Also, if you haven't invested in Apple's new Mighty Mouse then hold down Ctrl and click to reveal right-click contextual menus.

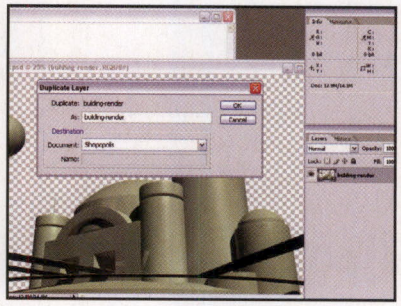
Know your shortcuts

Photoshop has innumerable shortcuts – you can even customise them if you like. Here are a few shortcuts that should help your workflow and will certainly be useful throughout this tutorial:

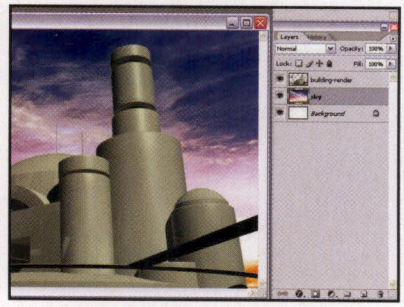
- Hold down the Spacebar to switch to the Hand tool and navigate round an image.
- Zoom in and out of an image using Ctrl/Cmnd+[+] and Ctrl/Cmnd+[–].
- Press F to cycle through full-screen modes.
- Press Tab to hide or reveal tools and palettes.
- Duplicate a layer with Ctrl/Cmnd+J.
- Go to the Transform tool with Ctrl/Cmnd+T.
- Step back through the history with Ctrl/Cmnd+Alt+Z.



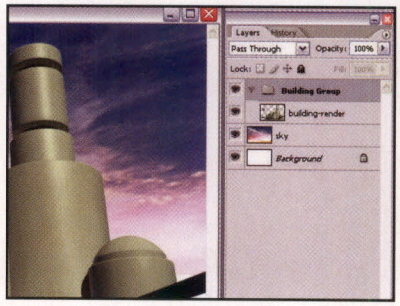
1 Create a new document. Name it Shopopolis and then enter 24cm for the width, 14.5cm for the height and set the resolution to 300 pixels/inch. Now click the Bridge/Browse button on the top grey bar. Locate the tutorial folder and open building-render.psd by double-clicking on its thumbnail.



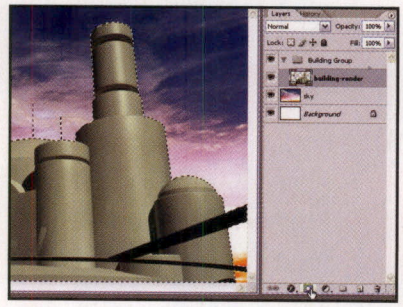
2 In the Layers palette, right-click on the layer and choose Duplicate Layer. Select Shopopolis as the destination, then click OK. This method may seem a bit odd when you can just copy and paste, but the layer will be placed in exactly the same position as in the original document, saving time spent nudging it around to get the layers lined up.



3 Let's add some sky. Click the Bridge button again. Now open sky.jpg from the disc. Duplicate the layer into the Shopopolis document as before. In the Layers palette of the Shopopolis image, drag and drop the sky layer so it's beneath the building-render layer.



4 Create a new Layer Group by clicking on the folder icon at the bottom of the Layers palette. Double-click on its name and call it Building Group. Drop the building-render layer into the new group.



5 Now add a layer mask so that everything added to the group is constrained to the shape of the building. Right-click on the thumbnail of the building–render layer and choose 'Select Layer Transparency'. Select Building Group and click on the 'Add layer mask' icon at the bottom of the palette.

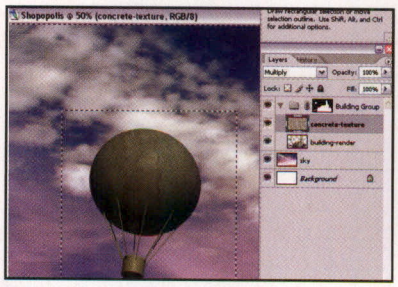
6 Open concrete-texture.jpg. Copy and paste this into the Shopopolis image. Rename it concrete-texture and place it in the Building Group above building-render. Set its blending mode to Multiply. Now you have a nice bit of texture that is constrained solely to the building by the layer mask.

Part 2: Loose ends

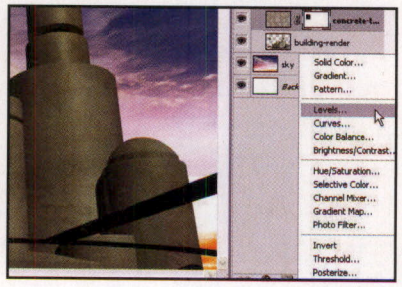
Tidy things up a bit before moving on to the next stage of the project…

Stay organised

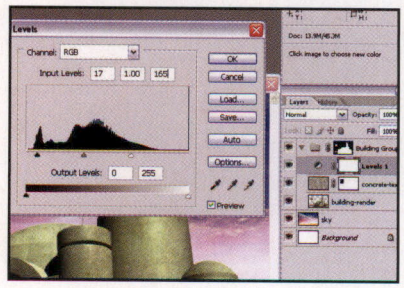
It may seem obvious, but some things are worth pointing out time and again. Regularly save your work, because you never know when your computer will crash. Equally obvious, it's worth naming all your layers and layer groups so you can avoid confusion later.



1 Balloons aren't made of concrete, so let's fix that. Make a rough marquee selection in the sky around the balloon, select the concrete-texture layer, Invert Selection (Ctrl/Cmnd+Shift+I), then click the 'Add Layer Mask' icon. Job done.



2 The building is looking a little too dark. You can use an Adjustment Layer to tweak the Levels and make it brighter. The cool thing about using Adjustment Layers is that the changes aren't permanent, so you can always go back to it later and tweak it some more.



3 Click the Adjustment Layer icon at the bottom of the Layers palette (the circle that's half black, half white) and select Levels. Set the Input Levels to 17, 1.00 and 165. Click OK. Make sure the Adjustment Layer is within the Building Group and higher up the layer order than the texture and building renders.

Part 3: Adding signage

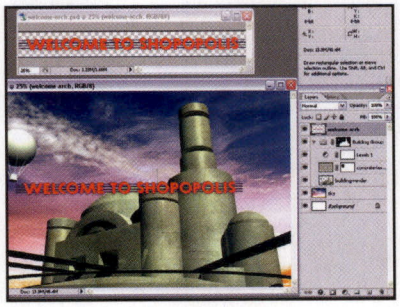
Let's move on – but don't forget to save your progress...

Take it to the Bridge

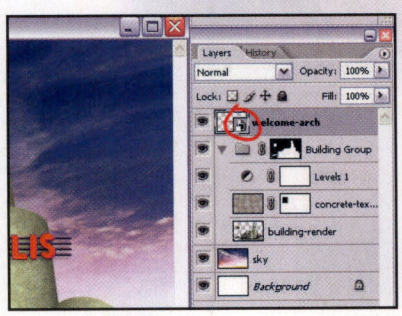
Clicking the Browse button opens up the Bridge. It's been around for a while (previously called File Browser) but feels more solid and complete in this latest release. The Bridge is an asset management tool that enables you to organise your files and also, as the name suggests, help you work between your Adobe *Creative Suite 2* programs.

Smart Objects

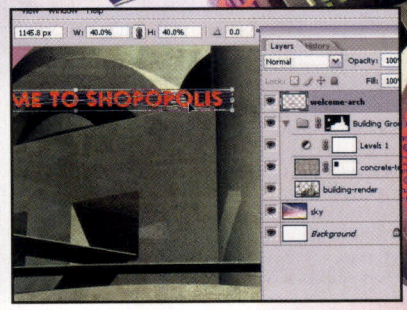
It's simple: Smart Objects rule. They really add flexibility to an image if used correctly. If you use Smart Objects for every sign and window on this image, you could change the look of the whole illustration in a flash. By right-clicking (Ctrl-clicking on the Mac) on a Smart Object layer and selecting Replace Contents, you could drop an entirely new image into a layer while maintaining all the careful warp transformations. It's a smart feature.



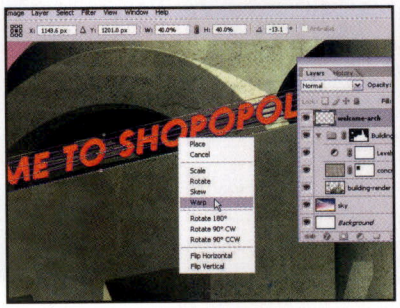
1 It's nearly time to try out the new Image Warp tool. Start by mapping the welcome message onto the arch. Open welcome-arch.psd from the disc. Select all, then copy and paste the image into Shopopolis.psd. Make sure this new layer is outside and above the Building Group you were working on previously.



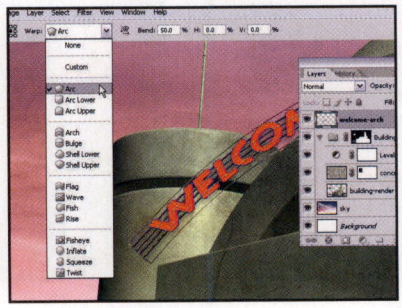
2 We're going to turn this layer into one of *CS2*'s new Smart Objects, meaning that whatever Warp transformations we make will remain editable – very handy. Right-click on the layer and choose 'Group into New Smart Object'. Notice that the thumbnail gets an added icon to reflect its new 'Smart' status.



3 Use the Move tool (Ctrl/Cmnd-drag) and place the welcome-arch layer over the arch. Zoom into the image so that these two elements are quite large on your screen. Hit Ctrl/Cmnd+T to bring up the Transform tool, scale the layer down to about 40 per cent of its size, and don't hit Commit Transform just yet...

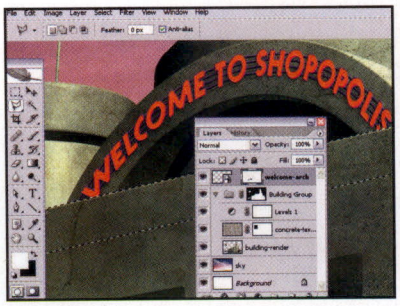


4 Rotate the layer so it's parallel with the horizontal edge of the front of the building. Right-click (Ctrl-click on the Mac), and choose 'Skew'. Grab the handle on top and in the middle of the bounding box, drag to the right until the letters look like they're standing up straight. Now, right-click/Ctrl-click and choose Warp.

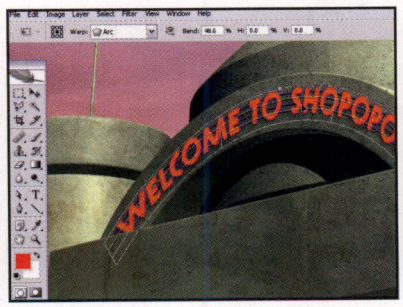


5 Don't worry about the grid for the moment, because we're going to use one of the Warp tool presets. Choose Arc from the Warp dropdown list. Slip back into normal Transform mode by hitting Ctrl/Cmnd+T or clicking the Warp button on the right of the top grey bar.

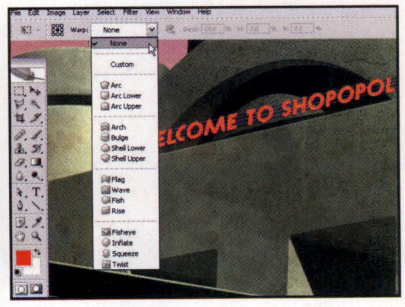
6 Now narrow the layer by dragging the edge handles until the width is approximately 25 per cent. Accept the Transform by hitting Enter. The sign should now follow the arch convincingly.



7 The ends of the sign are probably sticking out too far and spoiling the illusion. So add a layer mask by clicking the appropriate icon at the bottom of the Layers palette. Using the Polygonal Lasso tool, select the area that you want to hide and hit Backspace.



8 Things should now look pretty good. But if they don't, don't worry – that's why we're using Smart Objects. Go back into the Transform tool (Ctrl/Cmnd+T) and select Warp mode (right-click or Ctrl-click, select Warp) and you can push and pull and tweak the settings to your heart's content.



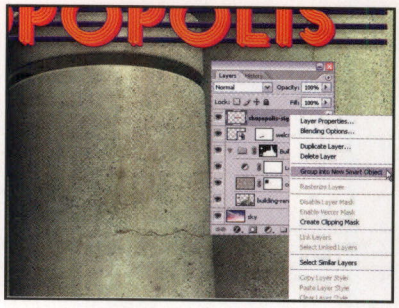
9 If at any point you want to start the transformation from scratch then just select None from the Warp preset dropdown list. Then enter the default values (100 per cent for scale and 0 for rotation) in the Transform tool number boxes in the grey bar at the top of the screen.

Part 4: More signs

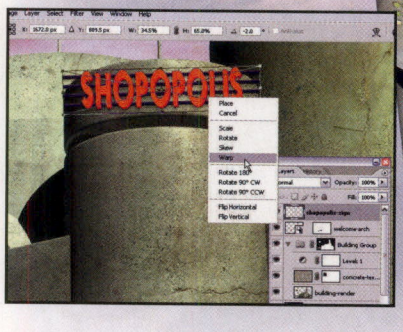
Introduce the Shopopolis signs using the Warp tool...

Palette overload

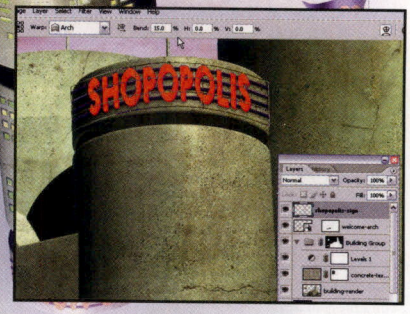
Photoshop has always been cursed with a large array of floating palettes. With *CS2*, some of them have grown in size to accommodate tool tips. Avoid clutter by closing any palettes you don't need or dragging them to *Photoshop's* own dock (the dark grey area at the top right of the screen). You can customise palettes by dragging tabs between palettes. For this tutorial, we'll be relying on the Layers palette. Other trusty stalwarts that will come in useful are the History, Navigator and Info palettes.



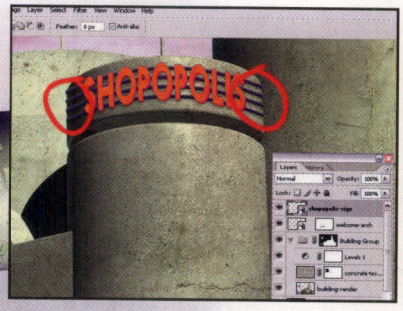
1 Open shopopolis-sign.psd, then copy and paste the layer into the big Shopopolis image. Rename the layer shopopolis-sign and convert it to a Smart Object as before. Move the sign so it's above the cylinder just on the right of the arch, and zoom in to the image (Ctrl/Cmnd+[+]).



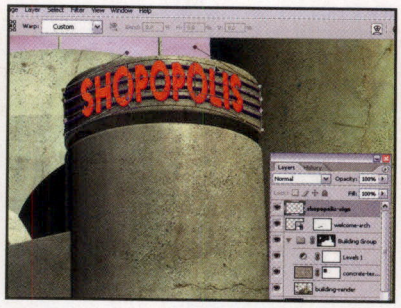
2 Enter the Transform mode (Ctrl/Cmnd+T) and scale the sign around until it's about the right scale for the top of this 'tower' – about 34.5 per cent wide, it's 65 per cent high and rotated by -2 degrees. Now into the Warp tool again: right-click and select Warp.



3 Choose the Arch preset from the dropdown. Now grab the handle at the top of the Warp grid and pull it down to reduce the curvature. Get the curve to match as closely as possible to that of the concrete cylinder behind – 15 per cent for the Bend value should do the trick. Press Enter.



4 Now that looks pretty good, but the left and right edges of the sign don't seem to bend away steeply enough. You can go back and adjust the transformation without affecting the quality of the layer, because this layer is a Smart Object. So, once more into the Warp tool.



5 In the dropdown, select Custom. There should be handles at each corner of the grid, so have a tinker with them. You can also grab the grid at any point to push and pull the layer around. It's tricky to get the right results, but the interface is quite intuitive, very hands-on.

6 You should be feeling quite confident with the Warp tool by now. Add the Shopopolis sign to the left-hand cylinder. You'll need to mask out some of it so the sign looks as if it goes behind the arch. Using the same steps, add the Spend More sign to the tallest tower.

Part 5: Warp master

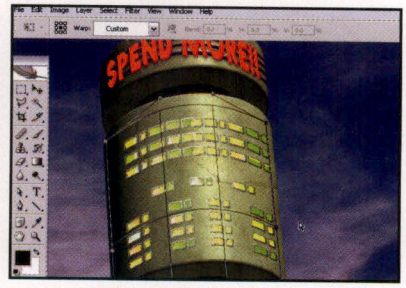
Add the remaining signs, windows and flags to your illustration...

Take control

If you start exploring the different ways of interacting with *Photoshop*, you may not need to visit the menu bar at the top of the screen that much. Right-click (Ctrl-click on the Mac) and discover a wealth of contextual menus that will make your *Photoshop* skills silky-smooth. Learn a few keyboard shortcuts and don't be afraid to rearrange and customise your palettes. Dive in, push and pull things around and you'll soon feel digitally empowered.

1 You can add the remaining signs wherever you want on the building, changing the emphasis if you want to. Remember to turn layers into Smart Objects before you start with the Warp tool, thus keeping everything editable and making your life easier.

2 Using the Warp Transform tool to add the flags should be a cinch for you by now. Try the Flag preset (Bend 20 per cent) and then, switching to Custom from the preset dropdown, pull in the left-hand edge a bit to make the flags look like they're tugging from the flagpole in the breeze.



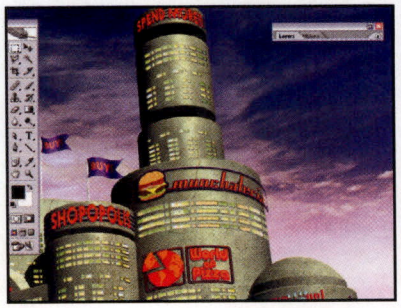
3 The windows are a bit trickier than the other elements because they cover such a large area on the building – you have to be more aware of perspective as well as the curvature. Once they're mapped on, try masking out clumps of windows to give the building a more authoritarian dystopian feel.

Part 6: More dimension and traffic trails

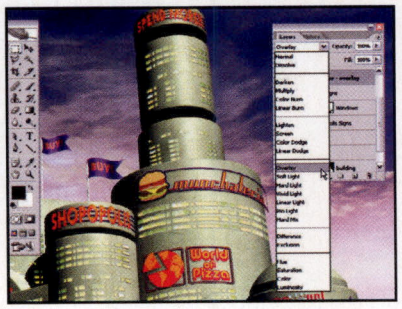
Learn some simple techniques to help lift the image and introduce movement...

Stretch out with your feelings...

When you ignore the presets on the Warp tool, you'll find it's a pretty touchy-feely experience. The Custom part of the Warp tool is less about entering the right numbers and more about judgement and intuition. Try to be subtle with your movements and remember that this is not an exact science – if it looks good then stick with it. Otherwise you could be stuck tweaking the same element for hours.



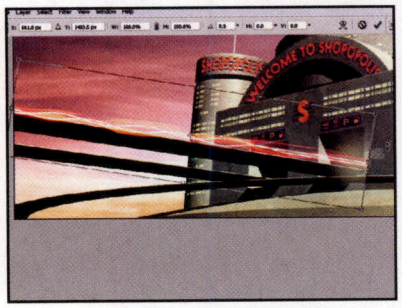
1 Despite the fact that the windows follow the curves of the building pretty well, their shading isn't affected. They look a bit flat. The windows need to be affected by the same light source that's hitting the building.



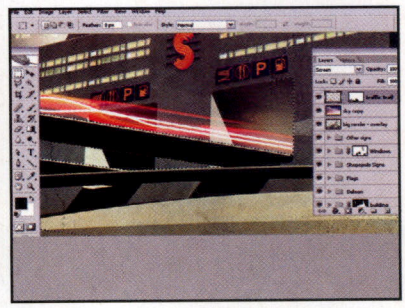
2 Duplicate the building-render layer (Ctrl/Cmnd+J). Now move this new layer to the top of the layer stack. Change its blending mode to Overlay. This gives you more contrast (making the image punchier) and makes the windows seem more part of the building – it adds to the illusion we're trying to create.

3 The building is still looking quite yellow, a bit detached from the sunset behind. Duplicate the Sky layer (Ctrl/Cmnd+J), and again move this new layer to the top of the layer pile. Set its blending mode to Colour and its opacity to 30 per cent. Now the building subtly echoes the colours of the sky.

4 The image needs more dynamism, so we're going to add some traffic trails on the roads going into the two tunnels. Open traffic-trail.psd, select all, then copy and paste the layer into the Shopopolis image at the top of the layer stack. Set the blending mode to Screen.



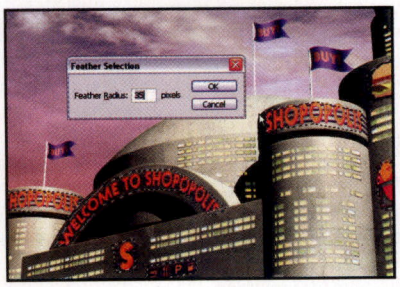
5 Drag the new traffic trail layer over to the roads on the left, so you can work on the foremost road first. Using the Transform tool, rotate the layer until it's parallel with the road. Now hit Enter to commit the transformation.



6 Add a layer mask. Select the Polygonal Lasso tool and make a selection of the area that you want to hide – that is, outside the right and bottom edges of the tunnel entrance and the black of the road. Hit Backspace. Now the lights are going into the tunnel. Repeat for the other road and tunnel.

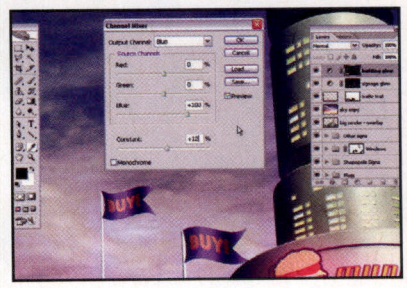
Part 7: Signage glow

This is another neat non-destructive trick using an Adjustment Layer...



1 Use the Polygonal Lasso tool to make a rough selection round the areas you want to glow (in this instance, the signs), holding down the Shift key to keep adding to your selection for each different sign. Then feather (Ctrl/Cmnd+Alt+D) the selection by about 35 pixels.

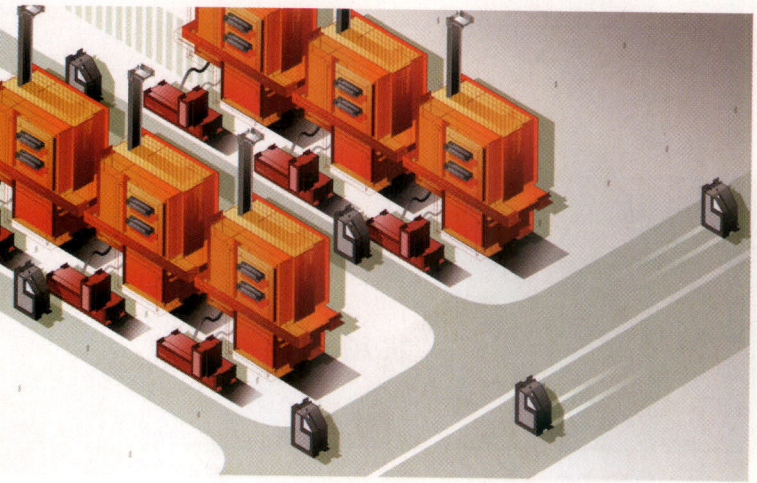
2 Click the Adjustment Layers icon at the bottom of the Layers palette and select Channel Mixer. A new option box will appear. There's plenty to tinker with, but for now you just need to bump up the Constant slider and the Blue Output Channel.



3 Now you should have a good neon pinkish glow. As a finishing touch, make a new selection around the edge of the building and, using the same Channel Mixer technique, add a hazy glow round the edge of the building. Your retro-futuristic image is now complete. ca-p

[w] www.aeriform.co.uk

Profile Sean Rodwell



Top right: This illustration, in Sean's now famous 'bubble' style, is of seven times Tour de France winner Lance Armstrong. It was created for the official Tour Guide.

Above: Commissioned by *.Net* magazine's Art Editor, Carlton Hibbert, for a report on Content Management Systems. Sean can make even the dullest subject look great.

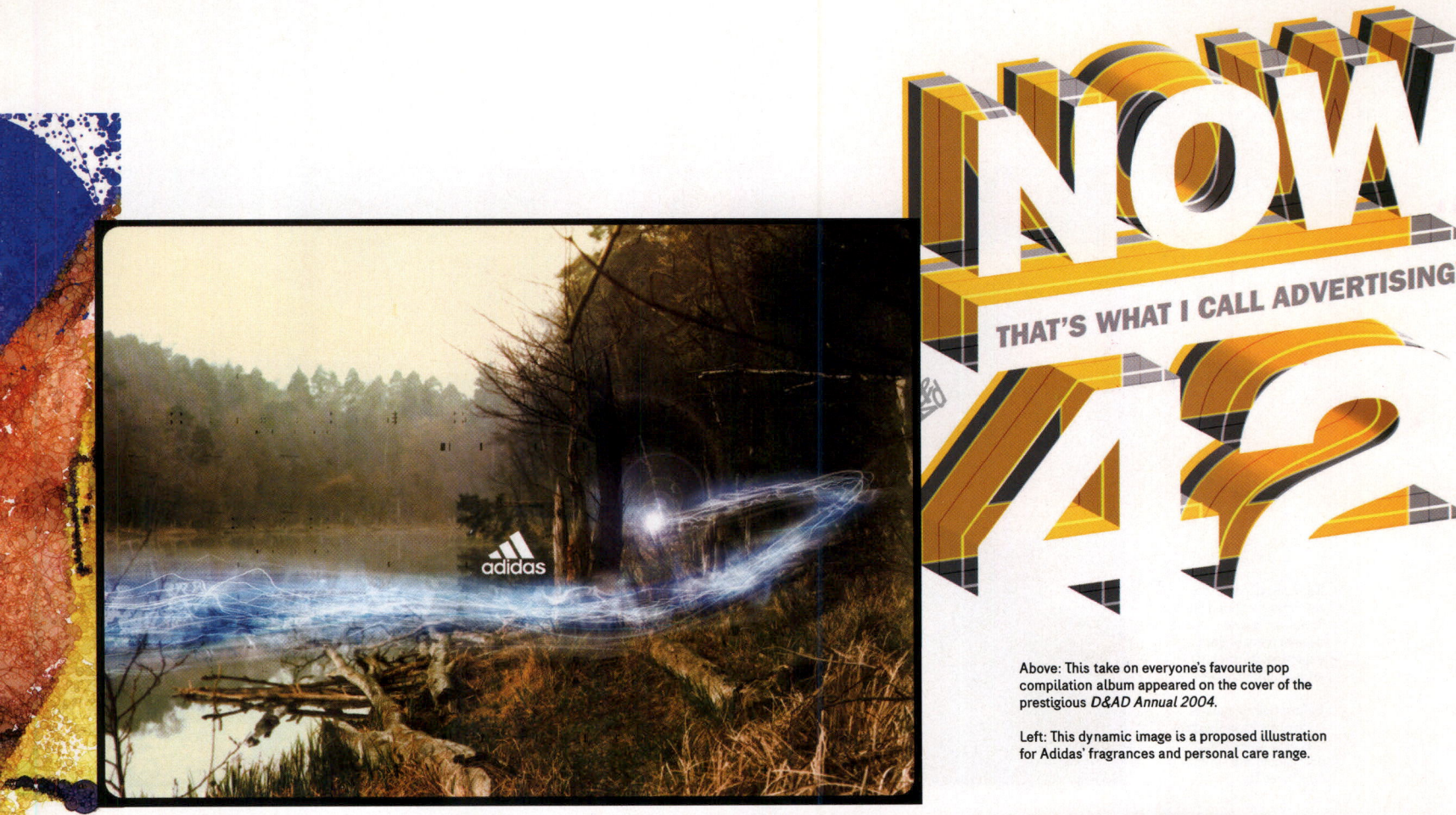
From the streets of Cleethorpes to global renown, Sean Rodwell is an illustrator striving to continue to develop his style. And his collection of books...

"There wasn't any university course or anything," recalls Sean Rodwell about his beginnings as a junior artworker in Cleethorpes. "I started on a YTS in 1987," he continues, "and spent three years moving around graphic design companies and gaining experience. I was earning £27.50 a week."

This is a far cry from Sean Rodwell's life today. Although the illustrator has returned to his home town in Lincolnshire, his CV is one that most illustrators would give their right arm for, if not both of them. Rodwell shot to fame earlier this year when he undertook a job for Nestlé – illustrating the latest campaign for Aero. It was a job that brought his work into the mainstream, not only in print (billboards, magazines and newspapers), but also on television. With New York based motion graphics company Psyop breaking apart Rodwell's bubble imagery and animating it for broadcast, this illustrator's bubble style soon confirmed him as one of the UK's hottest talents.

New and exciting

Rodwell has always had a fascination with new, and especially emerging, technologies, and it's this that inspired him to take a route into design and illustration. "My dad was an



Above: This take on everyone's favourite pop compilation album appeared on the cover of the prestigious *D&AD Annual 2004*.

Left: This dynamic image is a proposed illustration for Adidas' fragrances and personal care range.

Sean describes this image as an early test on the bubble style, later used in the Aero campaign.

antique dealer," he says, "and I was always expected to go into the business. I shied away from everything old and went for everything new and shiny." But after this natural parental rebellion Rodwell became disillusioned with the industry; and it took the introduction of technology to win him back: "I wasn't in any position to move away. So I left it all behind for a while scratching around, and then over a few years I became interested again. Everybody was now using Macs, and I was a cut-and-paste boy, with the design anyway."

He continues: "So I just dived right in and took a night course and got my hands on *Photoshop* and that was that. It was like a

Chocolate heaven: securing the Aero campaign

Sean's latest campaign for Aero has propelled him to new, rather dizzy heights. But the bubble style that is now so familiar to chocolate lovers everywhere wasn't something he developed for the client – it was something he already had in his armoury.

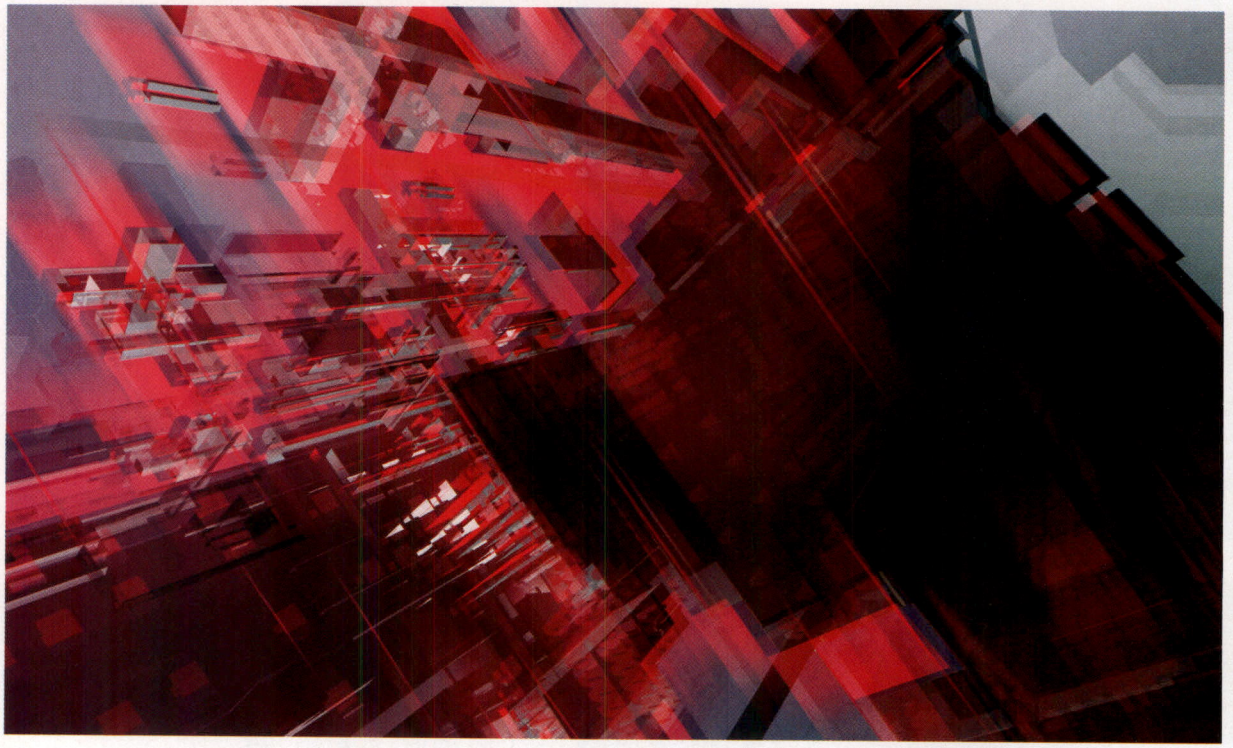
"The Aero job came through my agent, Advocate," he tells us. "I'd been playing around with this bubbly style for about three years and kept it under wraps. I didn't want to expose it on a job where I didn't think it was relevant. I held on to it for a while – it's lived on the hard drive and I've carried on adapting it and working on it."

But it didn't mean that there wasn't a lot of work involved for this job. "There was a lot of toing and froing with the client. They believed in the look so much that they wanted it absolutely perfect." He continues: "To the point where we were replacing individual bubbles and shifting them 2mm to the left. It's my most recognisable and my own personal favourite."

The artwork moved onto the small screen, courtesy of New York based Psyop. Psyop was simply given images, not even layered, and asked to make them move. It's something which Sean himself applauds: "I loved it when I saw it on TV – I think it went down really well, and Psyop did a brilliant job. It was so nice to see this style that I'd nurtured for a few years taken by someone else and put into motion."

So where does this style go from now? Surely it can't be used in any other context? We'll let Sean explain: "I think there's one more job in the bubble style and then I'd like to leave it alone. But even though it's only been the Aero job where it's had major exposure, it feels as though it's dying."

Working closely with the client, Sean created an image in his now famous bubble style for Nestlé's latest Aero campaign. The image would later be animated for TV by NY-based Psyop.



Right: Sean describes this image, entitled North Tower, as "a research and development project exploring abstract 3D architectural spaces."

Below: Sean's 'bubble' style rears its head again, this time for acid jazz diva Nicolette's album, *Life Loves Us*.

rebirth and then an addiction ever since. I went from not even being able to switch a computer on to not being able to live without one – almost overnight."

So, fast forward 18 years to a time when Rodwell has done everything an illustrator would want to: a major advertising campaign for Nestlé, stunning visuals for Adidas, a massive body of work for Digital Vision, credit card designs for Nat West, World Cup promotion for FIFA and more. So how does Sean work? What makes him tick? Well, you'll almost certainly be surprised to learn that he usually prefers to go straight onto the Mac. "Nine times out of ten, unless a client is after a specific route," he comments, "I will sit there and throw things at the screen and see what sticks, and then go from there. If I've just found a new style, or new techniques that I want to push, then I'll try and squeeze those into the new brief."

> "I'm happiest when playing around in *Photoshop*... Things are always evolving and emerging as you work"

On to the notion of 'style', a word that's bandied around in the industry and something that Sean believes is incredibly important to maintain integrity and self-confidence as an illustrator. "I have great respect for illustrators who find a niche style and push it and push it. It's also very nice to see a style develop over a certain amount of time. But personally," he continues, "I like to find a certain style and cane it for a while." Certainly very honest of you, Mr Rodwell.

"I'm happiest when I'm playing around in *Photoshop* and seeing what I can make it do. It's all about research and development to me. Things are always evolving and emerging as you work, and I'm always keen to push things forward."

Designer's block

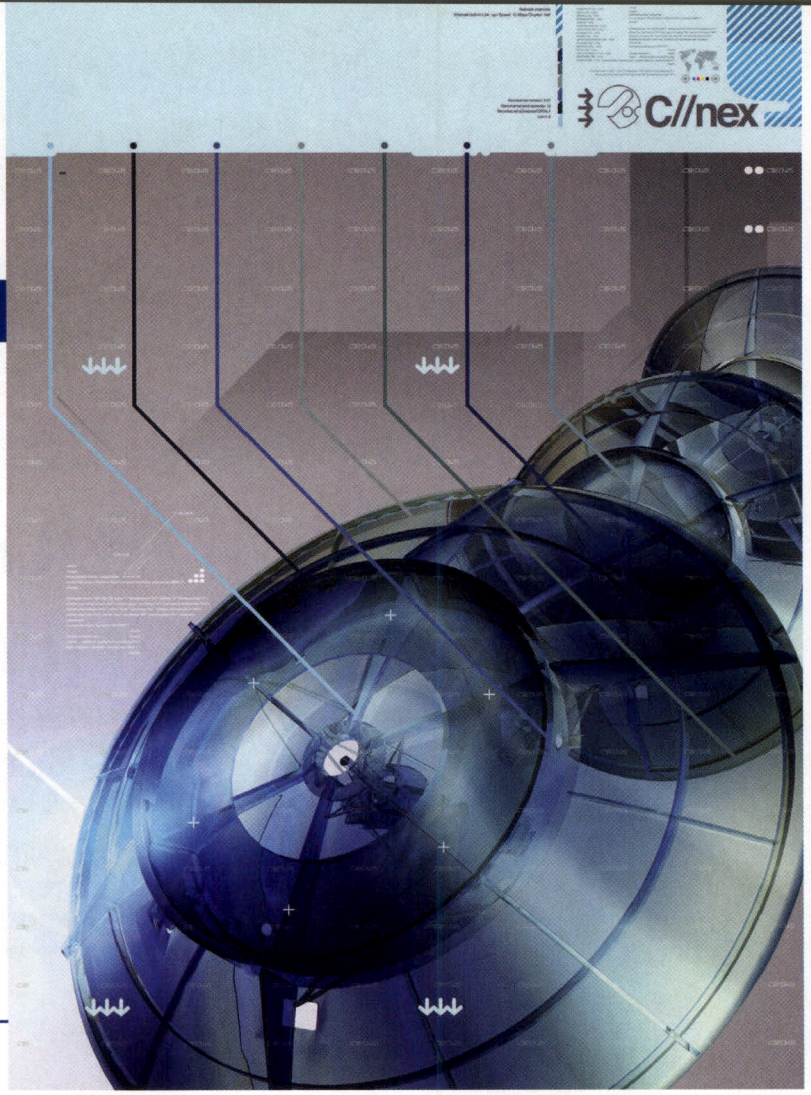
But this evolution and research can sometimes grind to a halt. Like all of us, from time to time, Sean hits a mental block. Luckily, he's worked out a rather intelligent solution. "If I'm working on personal stuff looking for new styles, I'll turn the computer off for a few days, even up to a week and just do things that will top up my levels again." Wait for it: "I've devoted the middle room downstairs to being a library. I'm mad on books. It's literally a room full of books. There's one big brown leather armchair and a reading lamp. I can just shut myself away and let things happen. This helps me experience new things and gain inspiration from the unlikeliest of sources."

To Infinity and...

The Digital Vision 'Infinity' series has graced many an art director's desk, and even the likes of *Computer Arts*' Senior Art Ed Roddy Llewellyn have been known to dabble with this awesome range of stock illustration. Although admittedly not Sean's most recent work, his DV illustrations still strike a chord as being extremely original and useful for anyone looking for a futuristic vibe.

"Digital Vision got in touch with me after seeing something in one piece on my website. And it blossomed from there. It was mostly *Photoshop*, although I collaborated with friends who were experimenting with 3D packages and they slipped me a few files and said 'what can you do with that'.

"I don't collaborate much these days though," he tells us. "When I was living in London I'd work with anyone who would give me the time of day. But I tend to work alone now because I find it gives me more freedom."



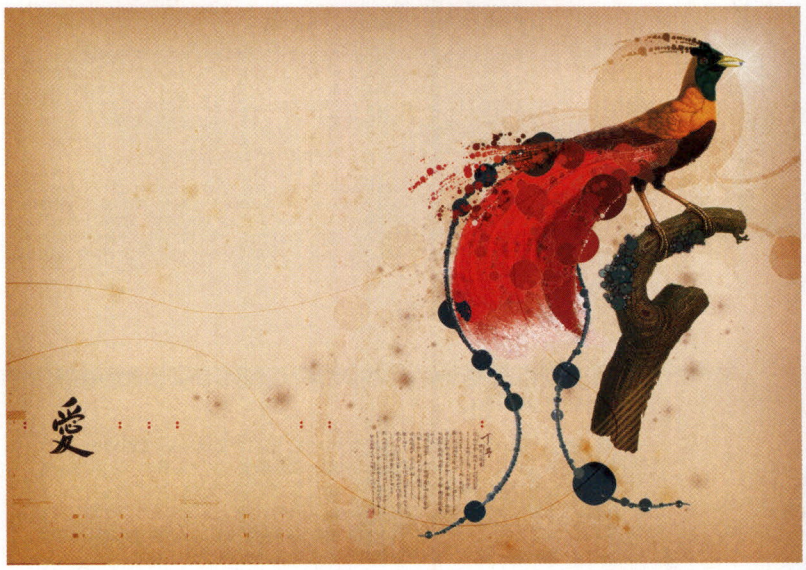
After living in London, Sean recently returned to Cleethorpes, an environment that he finds extremely rewarding, and one without the distractions of the big smoke. "I enjoy it here, it's quieter and I'm a five-minute walk from the sea," he explains. "It's influenced my work – it feels a lot more fluid now. And when I look back on my output from London I think it was more claustrophobic. It's only something I've come to realise recently."

Freelance life

Sean would recommend the life choice of freelancing to anyone, after gaining valuable experience, that is: "If I was to advise new designers or students, I would say it's best to get out in the industry. Personally I found it advantageous to be in the industry and be around like-minded people."

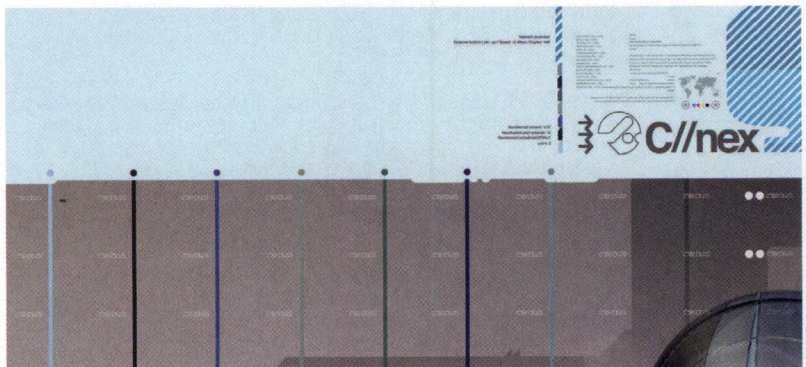
And now Sean's on a roll, he goes on to explain just how to succeed once you've got your foot in the door. "I think it's definitely a case of all or nothing. You've gotta dive deep down and completely lose yourself in it, all of the time, on every single job. This obviously doesn't go down very well with the wife, but I do resurface... now and then." So an angry spouse may be on the horizon if you're going to succeed as an illustrator!

With no major illustration jobs on at the moment, Sean is doing what every illustrator must dream of – having the time to take time off. In fact, he's "taking some time off after working my arse off all year." ca-p



Top: Entitled C//Nex, this image from Digital Vision's 'Infinity 2' series showcases Sean's incredible talent for exploring 3D space.

Left: Awww. This image was created for a book project to mark Sean's proposal to his then girlfriend and now wife, Sam. If only every man was as romantic.



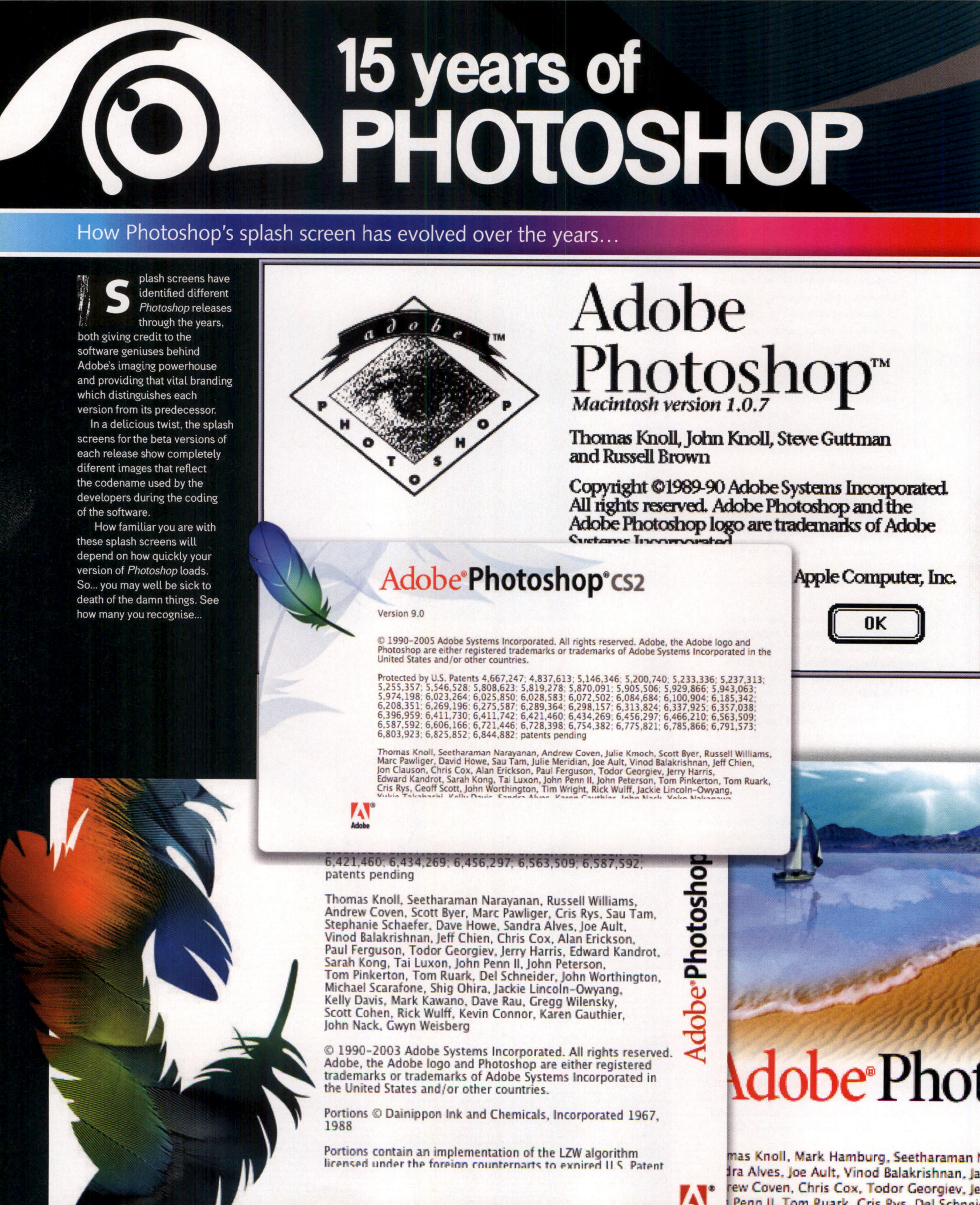
15 years of PHOTOSHOP

How Photoshop's splash screen has evolved over the years...

Splash screens have identified different *Photoshop* releases through the years, both giving credit to the software geniuses behind Adobe's imaging powerhouse and providing that vital branding which distinguishes each version from its predecessor.

In a delicious twist, the splash screens for the beta versions of each release show completely diferent images that reflect the codename used by the developers during the coding of the software.

How familiar you are with these splash screens will depend on how quickly your version of *Photoshop* loads. So... you may well be sick to death of the damn things. See how many you recognise...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Thomas Knoll, Seetharaman Narayanan, Andrew Coven, Julie Kmoch, Scott Byer, Russell Williams, Marc Pawliger, David Howe, Sau Tam, Julie Meridian, Joe Ault, Vinod Balakrishnan, Jeff Chien, Jon Clauson, Chris Cox, Alan Erickson, Paul Ferguson, Todor Georgiev, Jerry Harris, Edward Kandrot, Sarah Kong, Tai Luxon, John Penn II, John Peterson, Tom Pinkerton, Tom Ruark, Cris Rys, Geoff Scott, John Worthington, Tim Wright, Rick Wulff, Jackie Lincoln-Owyang,
Adobe
6,421,460; 6,434,269; 6,456,297; 6,563,509; 6,587,592; patents pending
Thomas Knoll, Seetharaman Narayanan, Russell Williams, Andrew Coven, Scott Byer, Marc Pawliger, Cris Rys, Sau Tam, Stephanie Schaefer, Dave Howe, Sandra Alves, Joe Ault, Vinod Balakrishnan, Jeff Chien, Chris Cox, Alan Erickson, Paul Ferguson, Todor Georgiev, Jerry Harris, Edward Kandrot, Sarah Kong, Tai Luxon, John Penn II, John Peterson, Tom Pinkerton, Tom Ruark, Del Schneider, John Worthington, Michael Scarafone, Shig Ohira, Jackie Lincoln-Owyang, Kelly Davis, Mark Kawano, Dave Rau, Gregg Wilensky, Scott Cohen, Rick Wulff, Kevin Connor, Karen Gauthier, John Nack, Gwyn Weisberg
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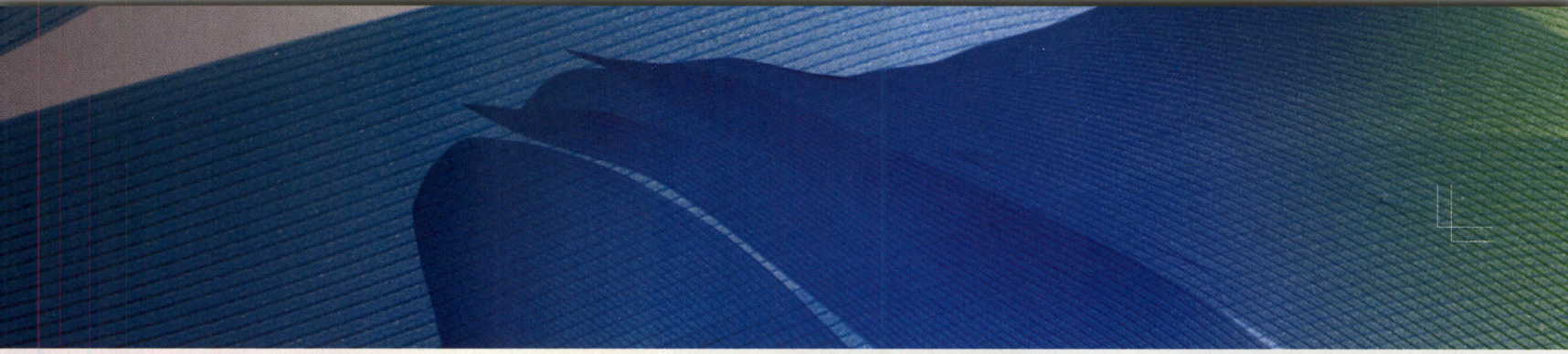

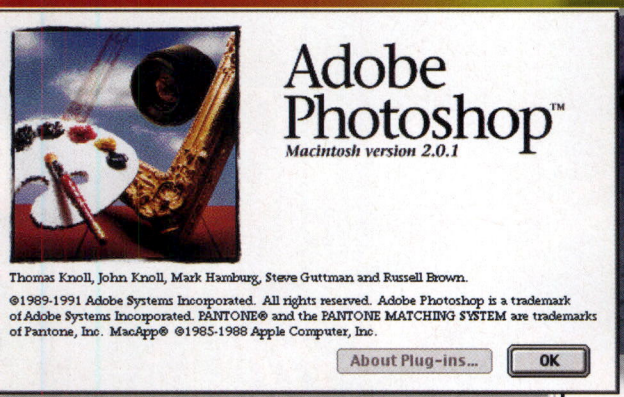

Adobe Photoshop™

Macintosh version 2.0.1

Thomas Knoll, John Knoll, Mark Hamburg, Steve Guttman and Russell Brown.

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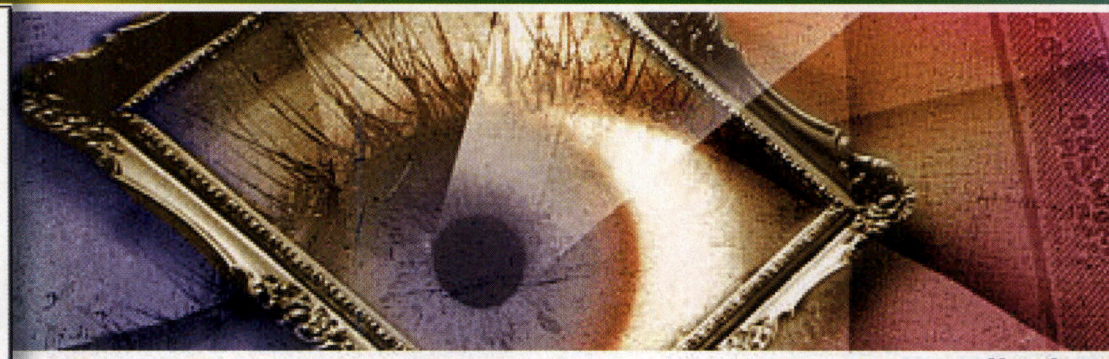

Version

Adobe® Photoshop® 4.0

Thomas Knoll, Mark Hamburg, Seetharaman Narayanan, Sean Parent, Greg Gilley, Laura Hoffm
Jason Bartell, Scott Byer, Allen Chan, Jeff Chien, Tom Costa, David DiGiacomo, Andrei Herasi
Charles McBrian, Marc Pawliger, Anapath
Doug Ahmann, Doug Olson, Paul Holland,

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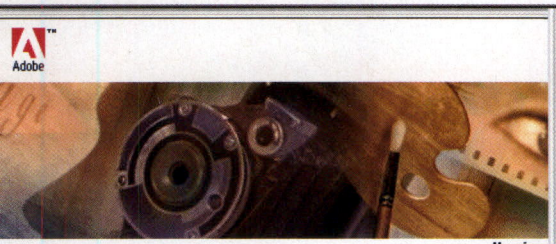

Version

Adobe Photoshop™ 3.0

Seetharaman Narayanan, Robert Sc ... rshall Spight
Thomas Knoll, Mark Hamburg, Kevi ... Olson
Paul Holland, Bryan Lamkin, Jo ... Russell Brown

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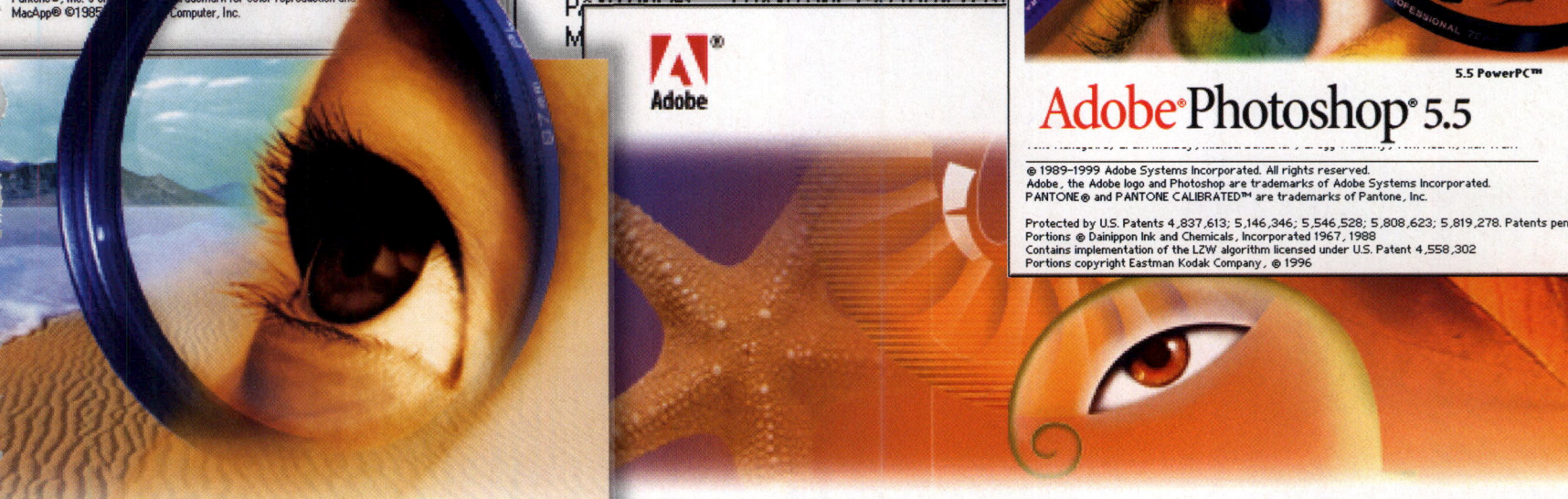

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Jerry Harris, Sarah Kong, Seetha Narayanan, Sean Parent, John Penn, Tom Ruark, Akik
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PHOTOSHOP CHANNELS EXPLAINED

Evoke the look of old, imperfect technology by creative play within *Photoshop*'s RGB channels

Creating RGB illustrations relies on *Photoshop*, but much of the work is actually created in *Illustrator*. In this tutorial, Studiospooky shows how these effects are staggeringly simple to achieve thanks to *Photoshop*'s compatibility with the other programs in *Creative Suite 2*.

As with most Studiospooky work, there is no clearly defined creation process, and the idea of mixing illustration and photography with extremes of light and dark was born out of experimentation. You don't even get to see what your creation looks like until the very end, when you bring the separate ingredients together – so be prepared to get to the end only to discover you need to go back, tweak the elements and re-do the third stage. It takes a lot of experimentation with line weights, line frequency and composition to get the most out of this technique, so use this tutorial as a rough starting point rather than a rigid guide.

This process graphically suggest the kind of breakdown that occurs when an image is translated into a cathode-ray tube (CRT) scan. Unlike print, which takes something light and darkens it with pigment, CRT works by projecting light out of darkness. When one ink prints over another, the substrate gets darker; when the separated colours of red, green and blue overlap, the black screen gets lighter. Forget about print separation here, because this process works completely differently.

Expertise provided by digital illustrators Studiospooky
[w] www.studiospooky.tv.

All the components needed to complete this tutorial can be found on the *Computer Arts Projects* disc 78 in the DiscContent\Tutorials\Tutorial Files\RGB channels folder.

Part 1: The basic elements

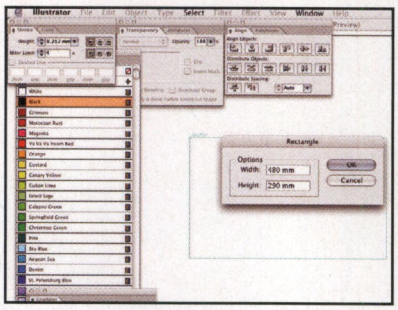
Although you end up with pixel-based artwork, 90 per cent of the work is vector preparation...

Experiment

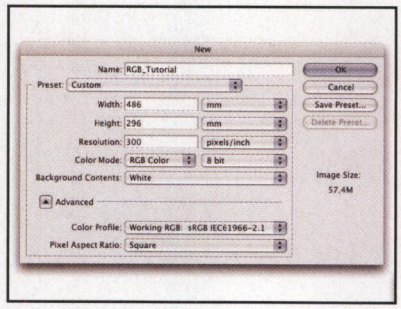
This method of working requires experimentation. Be open-minded and don't anticipate the end result, because it may take a few attempts before you have harnessed the best approach. The excitement lies in not knowing what you have created until the end, when you see the composite for the first time.

Photo quality

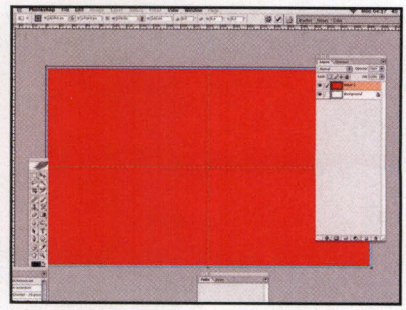
Don't worry too much about the quality of the photographic images you use, because this won't be apparent in the final piece. As long as you have an image that is clear enough to trace from, it really doesn't matter if it's out of focus, dark or framed badly.



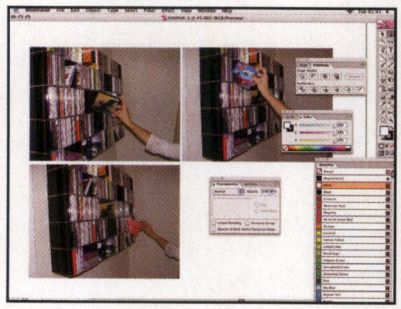
1 Begin with a blank document in a vector-based application such as *Illustrator*. Create a box at the exact size you want your image to be. For this project, that's 480x290mm. Now add a second keyline by selecting the box and clicking Object> Path>Offset Path and specifying a 3mm offset. This creates the bleed zone.



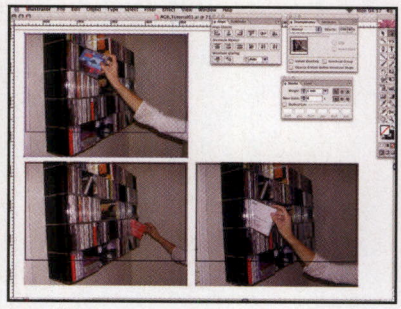
2 Make the two boxes strongly contrasting colours and copy them. Launch *Photoshop* and, with the *Illustrator* boxes in the computer's clipboard memory, go to File>New. *Photoshop* will automatically create document settings for a new document based on the information in the clipboard memory.



3 Paste the contents into the document and use the Magic Wand to select the inner rectangle, which in this case we've made red. Apply guides to this selection by dragging them from the top and left rulers. You now have a *Photoshop* document that matches the dimensions of your *Illustrator* document exactly.

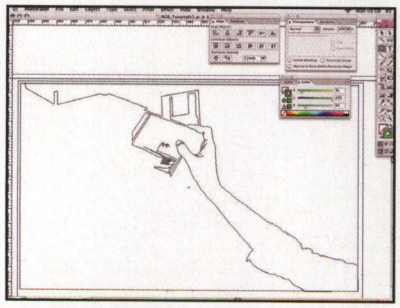


4 In a project we did for Island Records' Chikinki, we used images of a bank of TV screens in a control room. In this case, we've photographed somebody selecting CDs from a CD rack. Load the source images from the CAP78 disc onto your computer and place them in *Illustrator*. You'll now use these as tracing aids.



5 Place the three images within duplicates of the boxes that define the required picture size and bleed. Position and scale each picture to provide similar compositions. Don't overlay the images exactly because you won't be able to appreciate the channel effect, but don't position them too far apart because the image won't work at the final stage.

6 Begin to trace around elements in your image. Keep it loose, and stick to straight lines to enhance the low-fi technology feel. Don't worry about drawing anything faithfully – just allow the line you draw to flow into whatever shape is most prominent. In this case, the line jumps from the CD rack to a CD and is about to go around the hand.



7 It's a good idea to switch to keyline preview (Ctrl/Cmnd+Y) to see how your illustration is looking without the picture behind it. You can see how the line work has skipped over the boundaries of the subject matter and included aspects of the CD rack, the CDs and the arm. Keep your line work free, and include only the strongest lines in the image.

8 You can stop when you have a fairly even and prominent spread of line work over the original image. Don't worry about tracing fine details – this is meant to resemble low-fi technology and you don't want any line work to fill in at the final stage.

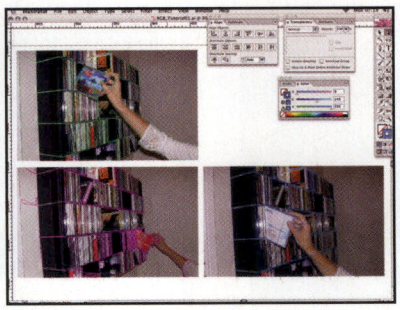
9 Now repeat the process with the second image, but try to trace a different path on different lines within the original image. The interest of this technique comes from the way in which different tones of colour appear with different overlapping elements. However, it's a good idea to see different things on different layers, so try to seek out a new path on this image.

Part 2: Building the picture

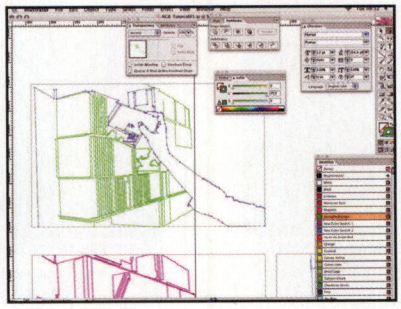
Now you have the basic elements, you need to start adding details...

New techniques

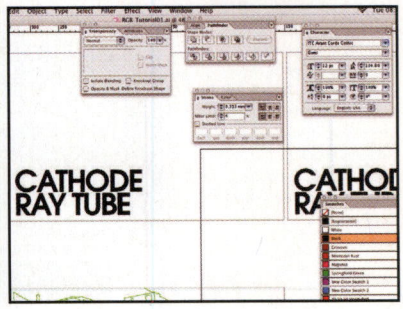
When experimenting with a new process, always remember how you did something, even if it seemed to be a mistake or didn't yield the required results. You never know when a mistake might become the key to a whole new technique. The technique shown in this tutorial has spun off into a variety of new ones for Studiospooky, some of which were born from mistakes made along the way.



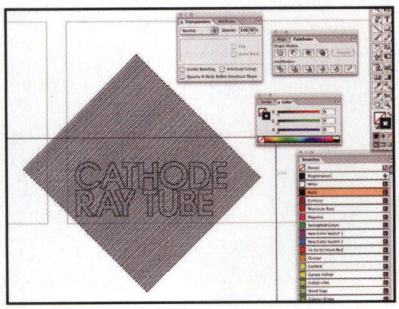
1 Here you can see the three separate diagrams over the original images. The line work is similar but does differ on each one. Each of these illustrations will become a different channel in the finished file, which will be made up of only red, green and blue out of a black background, and the different colours created by the intersecting lines.



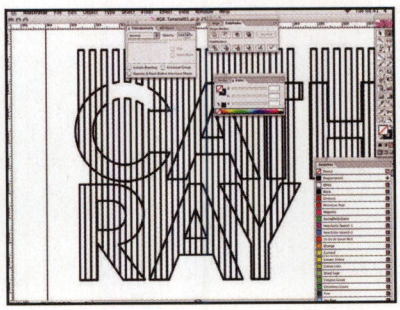
2 From the three images, select the most prominent visual element. The hand in the green image is the largest. Copy and apply this element to each of the three illustrations so that it appears as strongly as possible. You can also rotate the element slightly on the other two layers to see what effect that has.



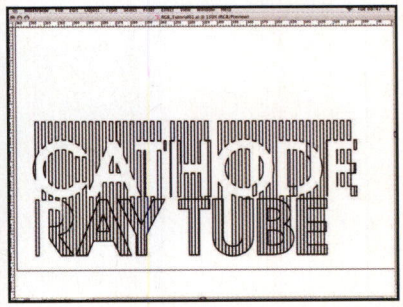
3 Now add some typography to the composition. We've chosen the words 'Cathode Ray Tube' in a simple, modern sans serif display typeface. Again, position the type inside the image boxes you created in the first step and clone three copies of this composition. You need to treat each piece of typography separately, just as with the images.



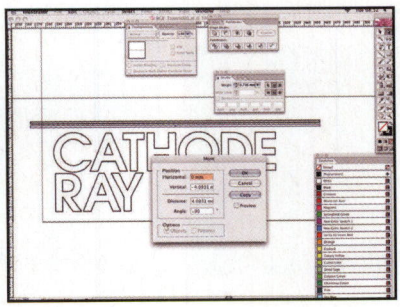
4 Outline the type by selecting it and pressing Ctrl/Cmnd+Shift+O. Draw a grid of boxes over the type. You need three different grids: horizontal, vertical, and a 45-degree angle. In the Pathfinder, select the type and the grid and press Divide in the bottom left-hand corner. This splits the grid and type into individual elements where the lines overlap.



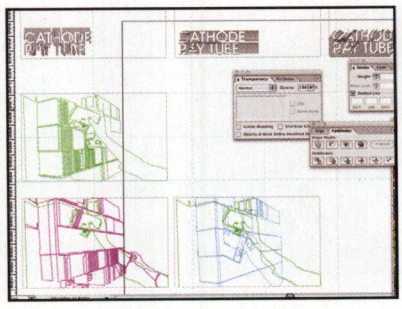
5 Using the white arrow cursor, select individual elements from this cluster of shapes and delete them. There is no formula for this. Simply delete enough until you have a composition you're happy with. Strip it back to a point where it's still easily legible but obviously has missing parts (as though the technology creating the image is on the blink).



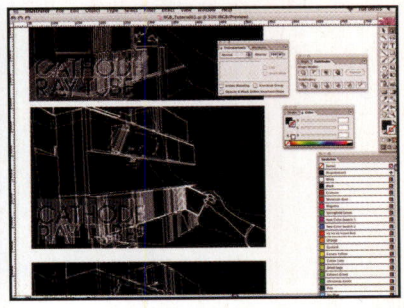
6 Repeat this process on the two other pieces of typography using different grids, so that there's an interesting overlap in the final piece. Here you can see the vertical grid at a point where we've deleted enough of the elements for it to feel right.



7 This screenshot shows how we're creating the horizontal grid work for the final piece of typography by creating a single rectangle and then using the Move window to specify where to offset a duplicate. We've set the parameters by pressing Copy once. Ctrl/Cmnd+D can then be used to continue duplicating to the same parameters, thereby creating a uniform grid of lines.



8 Once you have three illustrations and three pieces of typography, you need to combine each piece of typography with each illustration. Do this by dragging and using the boundary boxes to align the two different artworks over each other.



9 You no longer need the colours. Instead, you need to make the boundary boxes black and the graphic line work white with no fill. Now the images are ready for the *Photoshop* channels.

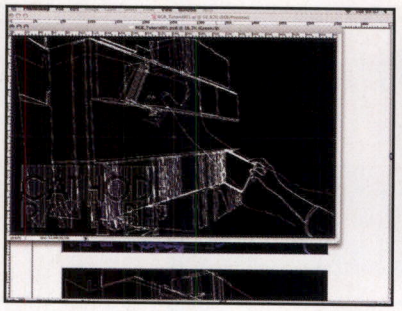
Part 3: Translating into pixels

It's not until the final stages of the process that you get your first glimpse of what you've created...

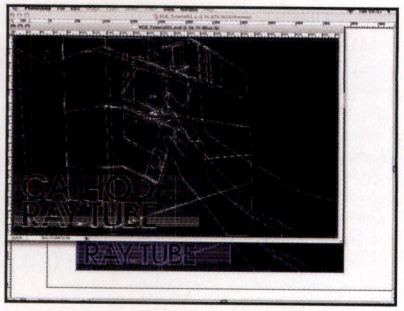
Manual variations

Vary the quality and appearance of parts of your image manually to override the computer's limitations in processing all visual data in the same way. Use the Dodge and Burn tools to create differences in tone, and the Sponge tool to blur areas of your image.

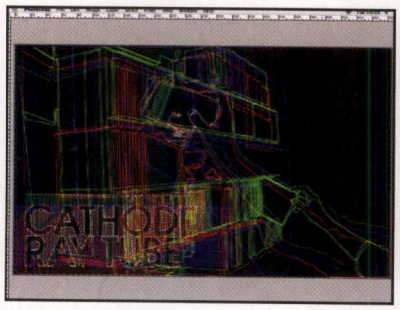
1 Select one of your composite images and copy it, switch to your *Photoshop* document and delete the guidelines layer you pasted in at the beginning. You should only have one single blank background layer in *Photoshop*. Working in RGB, go to the Red channel through the Windows>Channels palette. Paste your illustration into the Red channel.



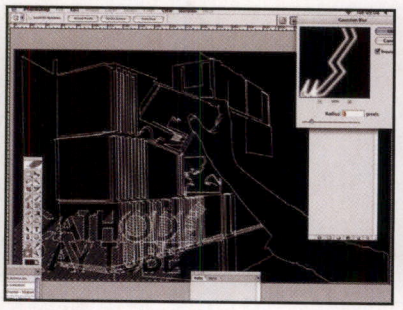
2 Repeat the process. Go back to *Illustrator*, select the second composition and copy it again. Return to *Photoshop* and select the Green channel (Ctrl/Cmnd+2), and paste.



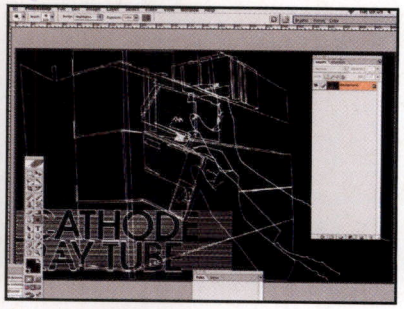
3 Go back to *Illustrator* for the final composition. Copy it, select the Blue channel in *Photoshop* (Ctrl/Cmnd+3), and paste.



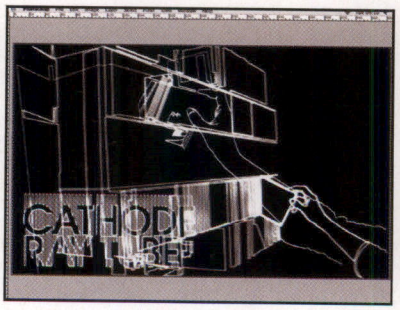
4 Now select Composite view or press Ctrl/Cmnd+~ to view your cathode-ray RGB composite. If you want to change the type or line work, go back to your three source illustrations and adjust them accordingly. Sometimes the line work can be too thick, or too thin, but this can be adjusted in *Photoshop* next.



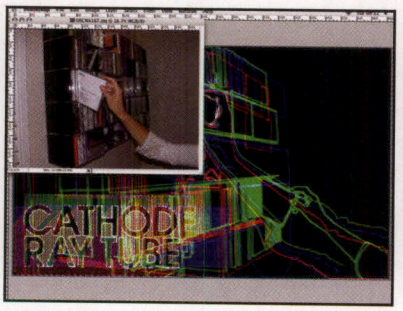
5 To eliminate the modern vector look of the composite, go back into each individual channel and add a different amount of Gaussian Blur. When things are out of focus, the degree by which they are out of focus tells us how far apart they are. Giving each layer a subtly different degree of blur will add a subtle perception of depth to the channels.



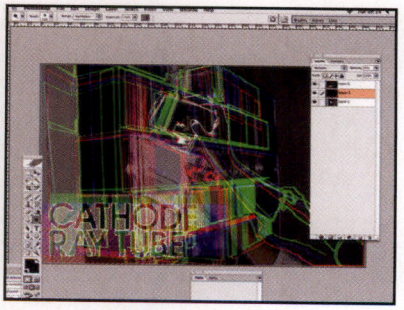
6 Use the Dodge and Burn tool to increase the thickness of the white line locally to create further variation. The Dodge tool should be set to 'Dodge Highlights'. Repeat this on all three channels, and focus on the areas you wish to be most prominent, because dodging the highlights will increase visibility in the composition.



7 You can also add very subtle motion blurs to individual channels. Make as much subtle variation to eliminate the sense that this has just been put together on a modern computer. Experiment with other filters and localised adjustments, but don't allow the image to deteriorate completely.



8 In *Photoshop*, open one of the original pictures on which you based your illustration. Try putting this in the background subtly to reinforce the image and create some tonal difference in the black background.

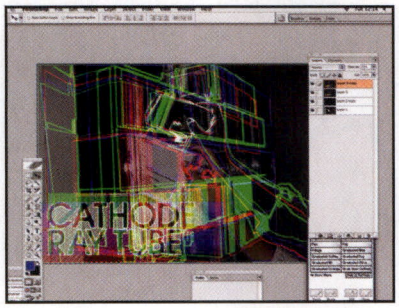


9 As you can see from the Layers palette, the original photograph is positioned behind the RGB composite. We've also added a layer of black between them set to 40 per cent Multiply. This dulls down the image and prevents it from burning into the RGB image too much. The RGB composite layer is now set to Screen, so that it burns out of the base image.

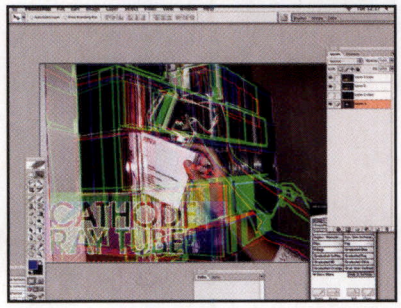
Translating into pixels continued...

Master artwork

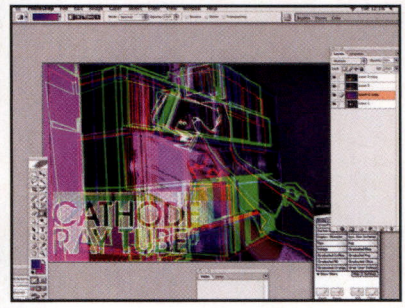
Always keep an RGB master of the artwork and only convert duplicates to CMYK. Once converted, it isn't possible to convert them back to the original RGB breakdown, and pure colours will now be split across different channels.



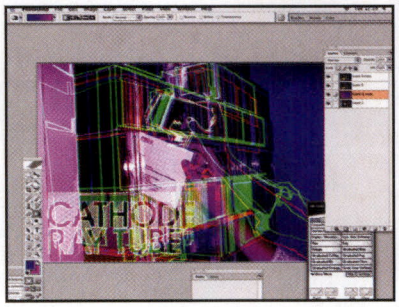
10 Duplicate the RGB composite layer and set it at 72 per cent. This boosts the RGB to full strength because the picture reduces the contrast between the black and the colours. The RGB line work appears faint over lighter areas of the picture because the process relies on maximum contrast between the black and the colours for visibility.



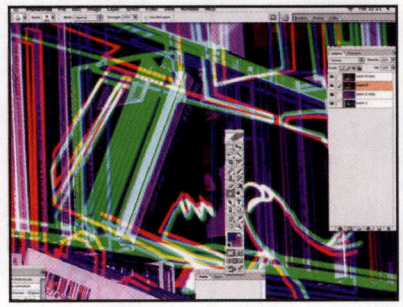
11 Switch off the black layer used to darken the image to see if the RGB can withstand the background image at full strength. There is no definite plan when working in this way, so have a play around. We like the image at full strength, but we don't like the colourisation. What do you think?



12 The black layer has now been switched back on, but it has a gradient consisting of a couple of vivid colours. We've transformed this layer from being plain black to being a vignette of colour. Now it acts like a lighting gel on the overall image.

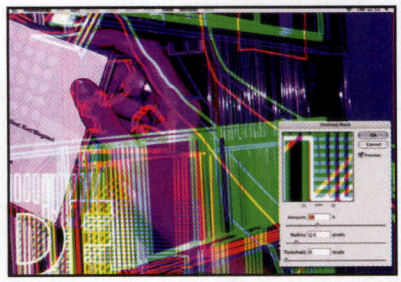


13 The colour gel has been set to 100 per cent and its interaction has been changed from Multiply to Overlay. This gives a much more fluid and rich set of tones to the image and enhances the mood.

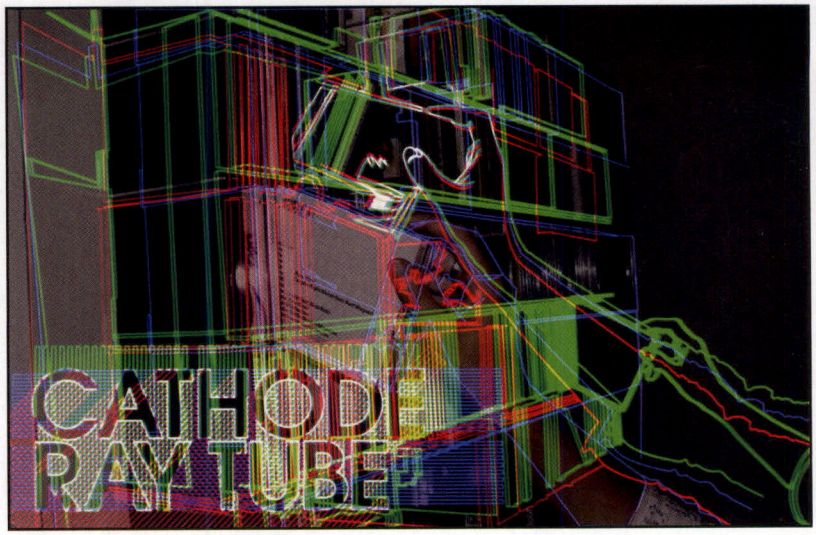


14 Zoom in on the image and use the Blur tool to soften areas of hard line work which look too modern and computer-like. Cathode-ray tubes are old technology and project a soft, imperfect image.

15 Flatten your image back to one single layer and convert to CMYK for print. The image always appears to be much duller once converted. As long as you convert it using the appropriate conversion method, it will print as vividly as litho allows, although this will never be as bright as it appears projected as light out of a screen.



16 Finally, check the image for any areas that need softening, and adjust the levels of dark, midtone and light until you have a good crisp legible image. Apply Unsharp Mask if necessary. Save as a copy. Always keep the native RGB version as a master file. Once converted to CMYK, it's not possible to reconvert back to RGB with any accuracy because the colours will divide between channels instead of remaining pure. On the right, you'll see the finished piece created in this tutorial, but you should experiment with as many variables as possible to gain a greater understanding of what works and what doesn't. ca-p



Feature [illustration] Why Not Associates [w] www.whynotassociates.com

Action stations

Discover the power of *Photoshop*'s automation features and regain your creative time...

The word 'automation' may not exactly set the fires burning in your creative soul, but when you think about it, the less time and effort you spend on mundane repetitive processes, the more you can dedicate to the creative process. Not many designers enjoy processing images, converting them to a format that the client is happy with – they'd rather concentrate on actual image creation. That said, actions can be used creatively to repeat certain effects within images and illustrations, but more on that later.

Over a number of years and releases, Adobe has ploughed a raft of automation tools into *Photoshop*, beginning with actions in version 4. Actions are one of the most important tools to photographers, graphic designers, DVD designers, and basically anyone who wants to automate part of the design process. The uses are endless – from print designers changing image modes for use in a CMYK workflow, to photographers resizing images for a web portfolio – whatever field you're involved in, actions are indispensable.

So, how can actions speed up your workflow and thus increase your creativity? Think of an action as a recorded set of commands. And these commands can be replayed on any image. For instance, every day in your design job you may need to convert multiple images to CMYK. And probably not all at the same time.

Setting up an action

You can create a new action using the flyout in the Action palette. Hit Record in the same palette, and perform the image operation as normal. Then hit Stop in the Actions palette once you're done. Now you have an action that you can use over and over again. What's more, you can assign a function key plus a modifier if you so wish (such as Shift, Alt, and so on), making the processing of images even quicker.

Actions aren't simply about mundane tasks. They can be used as part of a creative workflow. Actions are compatible with layer effects, filters, and just about every feature of *Photoshop* – meaning the only limit to what you can record is what you can do.

But in truth, automation is all about speed. And speed often means multitasking – or in a *Photoshop* and imaging context, batching. Batching is, simply put, applying an action to a number of images at once. *Photoshop*'s bath-processing tools are extremely comprehensive, integrating with the host operating system and enabling you

Pro workflow

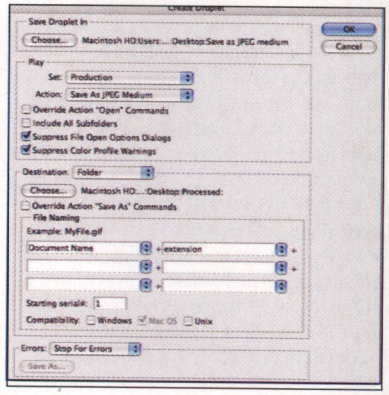
Paul M Smith is a renowned fine art photographer working in London. His clients include BT and Channel 4, but he's probably most famous for his cover artwork for the Robbie Williams album *Sing When You're Winning*. He shares with us a recent tale of automation: "When I recently reviewed a large number of digital images taken on a d2x I discovered that the majority had what appeared to be an area of flare or something on the lens," says Paul.

"The solution was to create a selection of the area using a combination of the Gradient tool and quick mask. Once the area was isolated, the flare was removed using Hue/Saturation set to green and I desaturated the selected part. Then a slight levels adjustment was applied for a perfect resolution to the problem. All of these functions were recorded using actions and then repeated on any of the affected images, saving hours of work and many useable images."

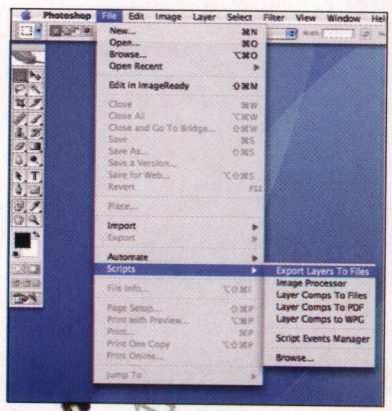
This is certainly a common use for actions – and an example of how you can shave hours off your workflow, enabling you to concentrate on the construction of your images.

Right: Paul M Smith ([w] www.paulmsmith.co.uk) uses actions to prepare multiple images for compositing into a final piece.

Creating a droplet can be handy when you have a process that you need to apply to many images, but not necessarily at the same time. Using the Droplet dialog, you can create a mini application that runs the chosen action. All you have to do is drag and drop.



The Script Event Manager is one of the hidden gems of *Photoshop*, enabling you to perform a script or action when *Photoshop* opens, closes, or another event is triggered.



to apply actions to folders of images, open files or those in Bridge (if Bridge is open). The *Photoshop* Batch dialog is a cinch to operate, offering you the choice of action to play, the ability to suppress colour profile and option dialogs (making the process even more automatic) and the source and destination for the images to save to. Batch processing is something that every designer needs to have a grasp of: it speeds up working with multiple images, meaning you can, for instance, take 50 high-res, 300dpi images, add a logo, change the colour mode, and save out as 50 web-ready JPEGs in around, say, five minutes. Do each one by hand and you're looking at a day's work.

Creating droplets

Following on from actions and batching, come droplets – probably one of the least used, yet most brilliantly useful tools in *Photoshop*'s arsenal. Droplets are self-contained applications that will, when you drag and drop a file or folder onto them (hence the name), perform the action you specified. These mini applications can sit anywhere on your hard drive, and are easy to set up.

First, record an action – let's say, for example, adjusting the brightness and contrast on an image to a designated amount, changing the image mode and saving as a JPEG. Then, using *Photoshop*'s File>Automate menu, hit the Create Droplet option, navigate to the action you just saved and specify a path. Then all you need to do is drop your folder of images or individual images onto the droplet to apply the action. It's as easy as that. Bear in mind you'll need *Photoshop* itself to use droplets – those without *Photoshop* on their machine will not

be able to use droplets, because *Photoshop* has to be opened for the image operations specified to be performed.

Event management

So we've looked at the fundamental automation options in *Photoshop*, but what else is there to speed up your workflow? Well, we'll start with the very much undiscovered Event Manager. Using *Photoshop*'s Event Manager, you can trigger scripts or actions on start-up, such as opening a document, closing a document and so on. How about using the Event Manager to warn you when an image you're opening is RGB? Certainly very useful for any print designer. Another use is to save an extra JPEG when saving your document – kind of an automatic back-up system working in the background.

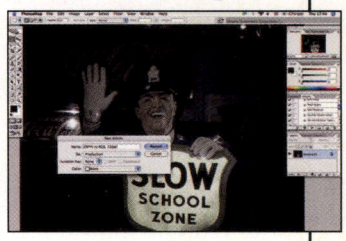
Setting up the Script Event Manager is extremely simple: you can access it from the scripts sub-menu in the *Photoshop* File menu. Then, it's a matter of choosing a *Photoshop* event – Start Application, Open Document, Close Document and so on – and linking it with a script or an action. Bear in mind that actions need to have an image to process – so make sure you link an action with an 'open image' command.

Photoshop also features some standalone scripts included right out of the box (and there are many more to be found on the web) – such scripts as Export Layers to Files, Layer Comps to PDFs and a very nifty Image Processor. The latter is rather like a batch command, enabling you to save your files quickly (either open or from a folder) as different file formats, and even run an action. As you start to discover how the scripting tools and actions functionality work in ›

Automating common tasks

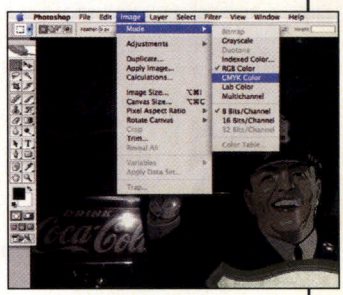
Batch processing isn't by any means the most exciting of tasks, but it is incredibly important in achieving a solid creative workflow, especially if you're dealing with a large number of images on a regular basis. Here we outline the process of setting up a batch for converting images to 72dpi and changing colour mode from CMYK to RGB.

Step One



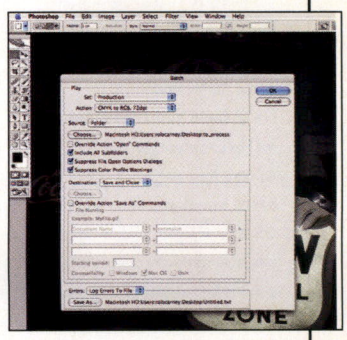
Begin by creating your base action. Open a sample image (or a copy of one of the ones you wish to batch) and make sure the Actions palette is visible. Hit the arrow flyout and choose New Action. Name the action and assign a function key if you wish.

Step Two

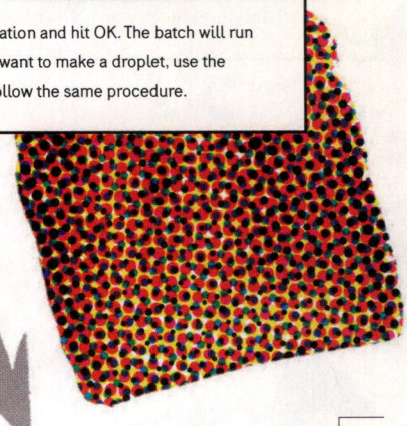


Hit the Record button to start the action recording. Now, drop the dpi value using Image>Image Size, and change the colour mode (Image>Mode>RGB). Bear in mind there's no time limit – you don't have to rush! Plan your actions properly, remembering that *Photoshop* will warn you about flattening layers before you change the colour mode, so you may need to run a 'flatten image' batch first. Save the image in the format you require. When done, hit Stop to end recording.

Step Three



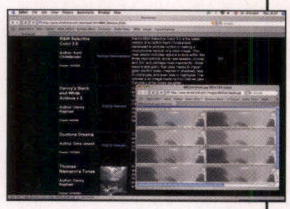
Now go to File>Automate and choose Batch. From the Play section choose the set in which you saved your action and then in the next dropdown, choose the action. Next, define the source – in this case, a folder of images. Check 'Include All Subfolders' if there are folders within folders. Check both 'Suppress File Open Options Dialogs' and 'Suppress Colour Profile Warnings'. Choose your destination and hit OK. The batch will run and convert all of your images. If you want to make a droplet, use the File>Automate>Droplet dialog and follow the same procedure.



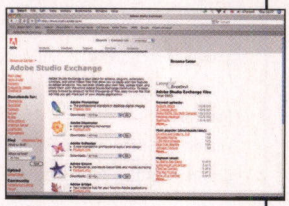
Useful websites

A plethora of creative *Photoshop* actions for you to download...

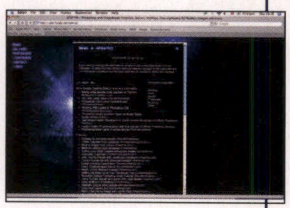
Action Central
www.atncentral.com
Action Central is a bursting resource for anyone wanting professional-quality actions. With large previews of the effect and everything arranged into categories, actions are easy to find and download. Site owner and *Photoshop* expert Jim Lewis has done a fine job.



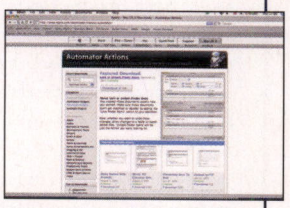
Adobe Studio Exchange
http://share.studio.adobe.com
With literally thousands of actions, scripts, brushes and so on, covering everything from text effects to buttons, Adobe's Studio Exchange is a great resource. It may take you all day to sift through the content, but there's something here for everyone.

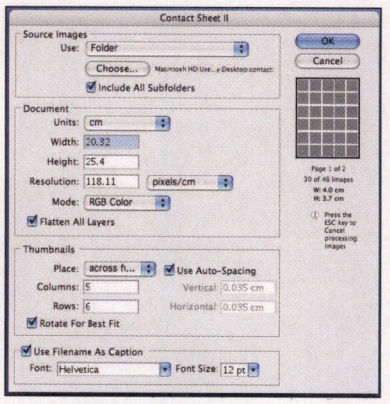


GFX
http://user.fundy.net/morris/
Photoshop expert Trevor Morris dishes up a vast array of tips, techniques and actions and scripts at his site – all labelled clearly and easy to install. Constantly updated, this site is definitely worth having in your bookmark list.

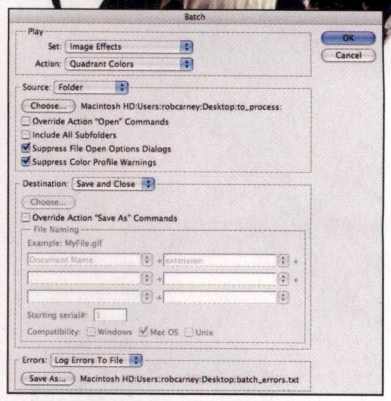


Apple Automator
www.apple.com/downloads/macosx/automator
Apple's Automator is a powerful script-based workflow tool built into Mac OS X 10.4 'Tiger', and on Apple's own site, the company offers *Photoshop* actions for Automator. Courtesy of completedigitalphotography.com, these Automator actions make it easy to drive *Photoshop CS2* from the Mac OS. Get your hands on them at the address above.





The Contact Sheet feature gives you many options for creating a sheet of thumbnail images. You can specify spacing, columns, rows, caption and more.



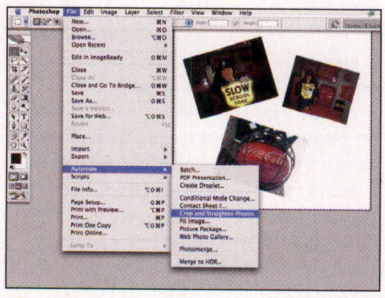
The *Photoshop* Batch dialog is incredibly easy to configure, enabling you to quickly set your actions to run on multiple files. A massive time-saver!

tandem, you begin to discover the power and flexibility of *Photoshop* automation.

Adobe Bridge, the centre of *Creative Suite 2*, also enables you to perform batch operations on images. You can use the batch rename function within Bridge, or you can get direct access to the Automate menu from the Bridge Tools menu. Just select your images in the Bridge browser, and perform the function as you would in *Photoshop*.

The Automate sub-menu in *Photoshop* holds a few more useful tools. Possibly the most interesting, and almost certainly most used, is the Contact Sheet feature. As the name suggests, this enables you to quickly create a contact sheet from a number of photos. Again, you can either use open images or specify a folder. A useful feature is the ability to specify the file name as a caption (used in conjunction with Bridge's batch rename this is very powerful), meaning you can quickly create a contact sheet image for a website or as a physical printout for a client. Rather comprehensive controls await, with options for rows/columns, spacing and, of course, image size and resolution. Similarly, Picture Package will automatically arrange one or more images on a page in standard (and non-standard) photo sizes. Think school photographs and you're halfway there.

A real hidden gem is the conditional mode change function. This is used in combination with actions. The idea is you can, while recording an action, choose to convert an image to a certain colour mode only if it is a certain colour mode. Make sense? Well, say you only want to convert CMYK images to LAB colours in a batch, and not RGB to LAB. Using conditional mode change is the way to go – just choose it from the automate sub-menu when recording an action.



The Crop and Straighten tool is particularly good when scanning in images. If the images slip on the scanner bed, simply crop and rotate them.

Additional automations

Moving on, Photomerge is a surprisingly good tool for creating panoramic images (as long as your camera is set up correctly in the first place), and Web Photo Gallery, although simplistic in its templates, provides an easy option for photographers wanting to upload a portfolio in double-quick time. Oh, and how could we forget Crop and Straighten – a simply stunning tool for, er, automatically cropping and straightening scanned photographs or other documents. PDF Presentation is also great for showing variations or finished docs to clients without the need for *Acrobat*; and Merge to HDR is nothing but brilliant, enabling you to merge two documents with different exposures to create a 32-bit high dynamic range image.

Automation may not be the first thing on your mind when you open *Photoshop*, but in day-to-day use it can be one of the most important feature sets in the application, and one that each and every designer should master. No one likes mundane tasks, and with a little patience in initially setting up your actions, batches and droplets, you can eliminate the boredom and let the creativity flourish. It's simply a matter of preparation... and letting the software do it all for you while you sit back and think up your next award-winning idea. ca-p

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Right: "I like creating bold, iconic images that are representative of a complete theme, and this is the definitive image of 'The Dreadful Story of Pauline and the Matches'," says Bob about this piece from his book *Der Struwwelpeter*.

Below: "A benefit of working digitally is being able to create a perfect mirror image," explains Staake. "I created the left half of the woman, and then when I was finished with it, copied and flipped it – and then, of course, placed the pie strategically."

Profile

[w] www.bobstaake.com

Bob Staake

This illustrator has created artwork for newspapers, magazines, children's books and more, and has stuck by *Photoshop 3* since 1995. We find out why...

Bob Staake is not a nostalgic man. Although well-known as an illustrator and cartoonist who's worked for a variety of clients, he very much lives 'in the moment', perhaps due to his desire to always be improving as an artist and moving forward.

This is immediately apparent when the first thing he mentions is his new book, *Der Struwwelpeter*. "As the son of German immigrants to the USA, I grew up with *Der Struwwelpeter*," says Bob. "It's a real example of how bizarre my career has been – I never in a million years could have imagined that I'd be reinterpreting the book. It's just one of those fortunate things that I never really know what the next project's going to be." This reality frightens many, but Bob thrives on spontaneity and not knowing what's coming next: "I have a real A.D.D.-style personality," he jokes. "I've always got to be working, doing something new. It can be a real curse, but in my case, I've counted this as a blessing and moved on."

Child's play

Like many in the industry, Bob always knew he wanted to work in a creative field. "Most dads filmed their kids doing cartwheels or jumping jacks – I'd run up to the camera with a colouring book page!" he explains. "I've been drawing for as long as I can remember, but as a kid you never make that leap to 'can I be successful and make a living at this?'."

That said, Bob was soon making a living with his art. "I drew sports cartoons for a local newspaper. They were intrigued that a teenager was doing professional-looking cartoons, so they'd publish them," recalls Bob. One day, he got a call from the NFL, who promptly asked for his father. When Bob explained that it was he who was doing the

Playing with fire

Bob explains his thoughts on 'The Dreadful Story of Pauline and the Matches' (pictured far left): "There's a lot going on here, in that you've got a kid on fire! But even with this subject matter, I want to keep things pretty. I still want it to look clean and stylised (although still kind of horrifying to a kid); I still want it to look like a good design... In fact, I work more and more on pieces like this as a designer rather than just as an illustrator. There's a motif on the hair, so it doesn't get lost against the flames. Underneath the piece, where the type is, there's a simple zig-zag pattern to suggest flames, but it doesn't distract from the main image – some illustrators would flame it up like crazy, but that would just be superfluous."

So how is this image representative of Bob Staake? "It's a strong image that has a certain shock value to it. I like creating bold, iconic images, with good use of design and colour, that are representative of a complete theme, and this is the definitive image of 'The Dreadful Story of Pauline and the Matches'. If I were to create a poster for *Der Struwwelpeter*, this is the image I'd use, because it sums up the book."

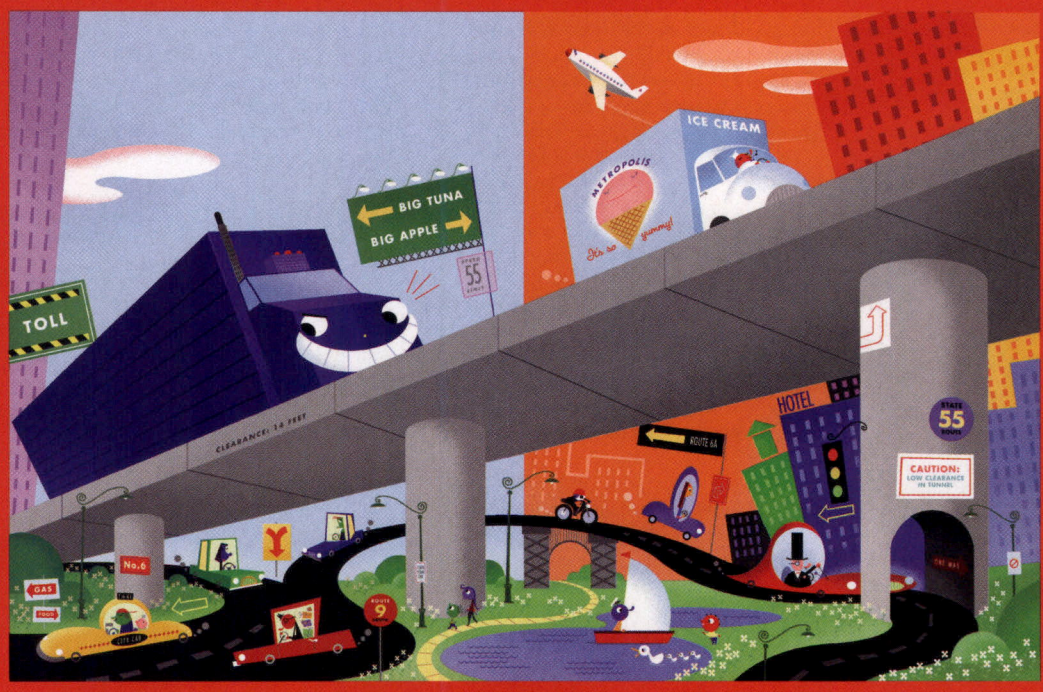
Left: "I like my illustrations to contain a narrative quality," says Bob. "I'd like to think that even if the art didn't illustrate my poem 'The Lab in the Cab' that a reader could look at the image and concoct their own story or poem based on what they see."

Below: Bob's design sensibilities are apparent in this illustration from 'I'm a Truck': "Although it's a spread, I break it up with a blue background on the left and orange on the right, which keeps me thinking on a page-by-page basis, but also with a complete panorama in mind."

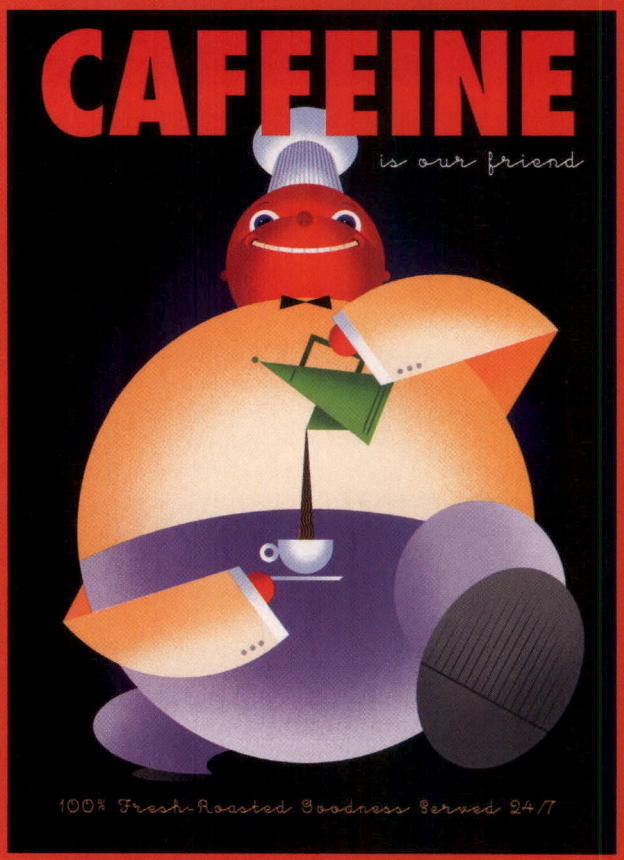
sports cartoons, the organisation, to its credit, gave him his first proper assignment: four illustrations for a feature in an NFL programme. Bob was just 15.

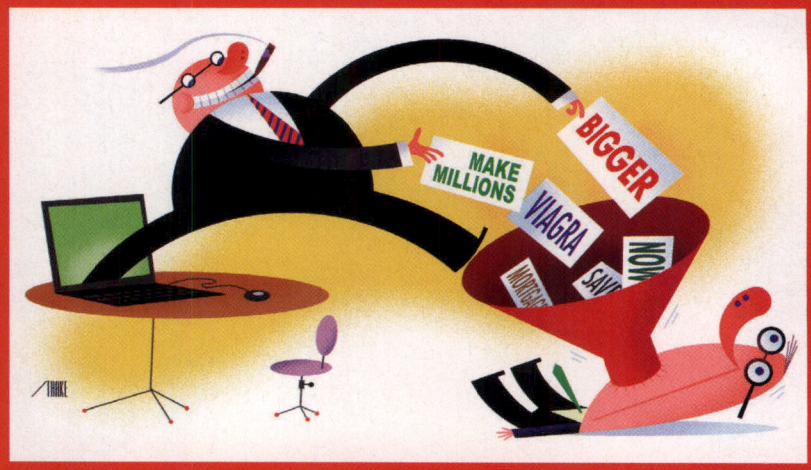
For a number of years, Bob primarily worked in inks, never pencilling out anything, and using cut-outs and a copier to make amendments, which suited his spontaneous approach. However, in 1995 he wrote *The Complete Book of Humorous Art*, and many illustrators he interviewed claimed to be working digitally. "This was bullshit, because most weren't working digitally at all – they were talking about how they *wanted* to work," says Bob. Nonetheless Bob became curious, consulted art directors who assured him he'd not have to 'reinvent' himself when working digitally, bought a Mac, went on vacation, and decided that the first piece of work created upon his return would be produced digitally.

"It was a spot illustration for the *Chicago Tribune*, which should have taken 20 minutes. It took four hours," Bob remembers, painfully. Soon, though, he got to grips with *Photoshop*, although, curiously, he's never upgraded the application. "I'm sitting here



Right: "I often have just a couple hours in which to read a manuscript, create sketches, crunch out final artwork and upload it to my server," says Bob. "That was the case with this illustration for *The Washington Post*."
Below right: Bob says his 'splatter' effect is created by setting his brush to 'dissolve', although many art directors assume he creates it with the help of a dried toothbrush.





Above: "I'm an unabashed 'caffeineoholic'," says Bob, "so this self-promotional piece was designed and sent to leading art directors. For some reason, some illustrators think me a 'master' of self-promotion, but I'm just not. If I send out promotional artwork to 500 art directors a year, I'm lucky."

with a G5 running *Photoshop 3*," he says, almost proudly. This surprises many: some simply can't believe he creates his work with such old software; others advise that Bob could work faster with newer software. "This isn't a stubbornness on my part," Bob explains. "What I like about *Photoshop 3* is that it's completely bare-bones. I don't work on layers — I work straight on to the canvas, like I used to with inks, and that's it."

Drawing with soap

Despite eschewing modern software, Bob totally embraced the most standard of computer interfaces: he uses a mouse rather than a tablet for his work, which he says is "like drawing with a bar of soap, but somehow it works for me." And as someone who now almost exclusively works digitally, he's also angry at the 'luddites' who still claim that digital art is less worthy, more automated and less organic than traditional art. "If you think applying a pen or pencil to a piece of paper is somehow more organic than working digitally, you're absolutely mistaken, because my digital work is far more organic than any drawing I've ever done," argues Bob. "Look at any of my recent books: there are no sketches or layouts for them, nothing that I worked from except a square on the screen. When you work this way, without any preliminary anything, when you just attack that computer screen with nothing more than a mouse and a keyboard, if that isn't organic, I don't know what is!"

> "What I like about *Photoshop 3* is that it's bare-bones"

So as someone who's always looking for something new, is there anything that really ties Bob Staake's work together? "My sensibility in the way I used to draw has changed dramatically, but there is a connection, in that all the work was done by one person who was going through this journey of figuring out what he wanted to do as an artist," says Bob. One thing he does feel that's essential for an illustrator is to be able to tell a story, sell a product, or get someone to pick up and read a magazine. "I was fortunate in coming from a classic cartooning background where ideas were at least as important as the art. For me, an illustration is a visual vehicle to get across a bigger idea," says Bob. "It's not enough to be able to draw a pretty picture that just impresses other illustrators What matters are the people who buy your books." Bob clarifies that while he is very appreciative of other illustrators being impressed by what he does, it means far more to him when he meets someone at a book signing who says they love one of Bob's books. "They don't care that it was some kind of awe-inspiring scene — they just care that the story and art worked in a symbiotic way to complement each other."

And that's the direction Bob believes the industry needs to move in: "Illustrators need to appreciate that the idea is more important than the illustration. People need to get their thinking skills down as much as their ability to draw an impressive image." ca-p

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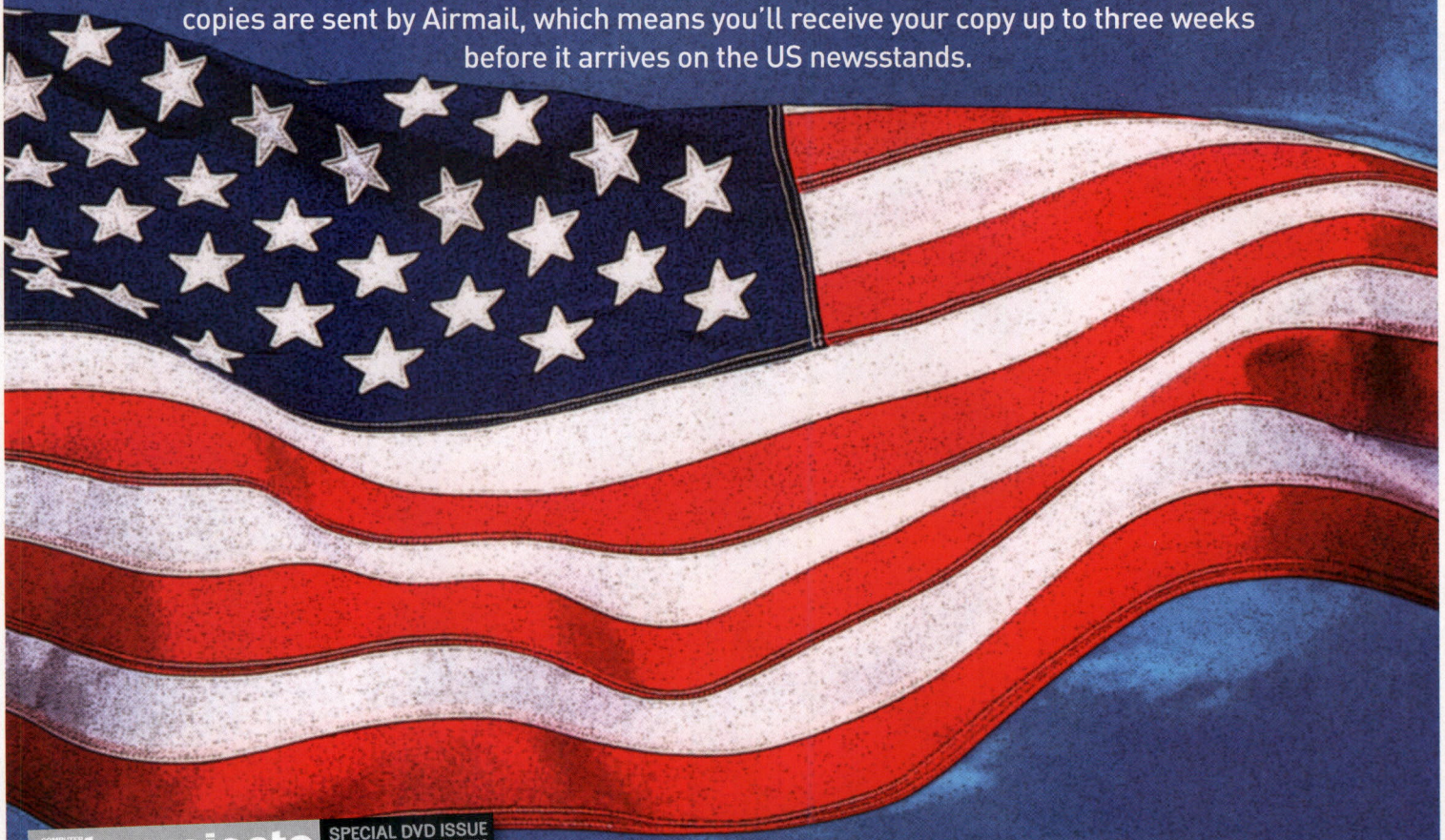

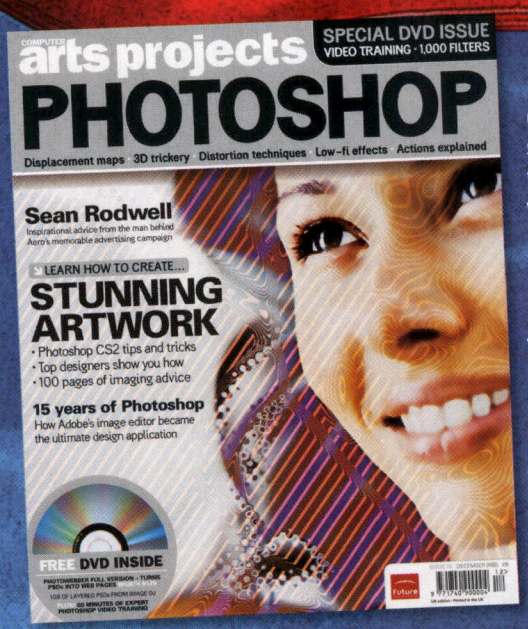
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[illustration] Derek Lea [w] www.dereklea.com

LOW-FI Effects

Create distressed, tactile, underground poster art effects. All you need is access to a good old-fashioned photocopier, some *Photoshop* know-how, and a willingness to experiment...

Every city has a club district, a focus of the local underground music scene. How can you spot it? Look around at the hand-made posters and photocopied gig flyers that are plastered everywhere. You'll find them on newspaper boxes, walls and doorways, even lampposts. These urban fixtures have become a familiar and often overlooked part of the urban decor in the same way that graffiti has.

Look closely and you'll notice that most flyers and posters have some common visual traits. Generally, they have poor registration, use only a couple of colours, or in many instances are simply photocopied. Even the artwork is often a collage of photocopied elements, put together quickly and on the cheap. This style of artwork is the antithesis of what *Photoshop* has come to represent.

Photoshop, to many, represents perfection — but let's not forget the beauty of imperfection. Certain rough regions of imagery can be incorporated into digital imagery quite easily, but they have to come from a source that is less than state-of-the-art. The common photocopier is an essential tool for producing traditional gig poster effects in *Photoshop*. We'll show you how *Photoshop* and 'photocopier' can work together seamlessly to simulate this wonderfully evocative and familiar low-fi effect.

Expertise provided by Derek Lea. Derek is an award-winning illustrator and published author. He lives and works in Toronto, Canada. To view more of his work, visit **[w]** www.dereklea.com.

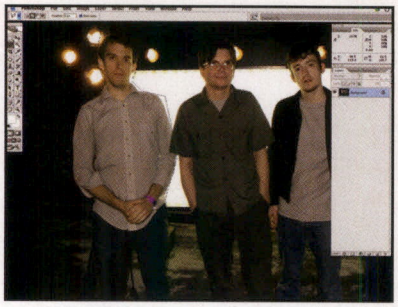
All the files needed to complete this tutorial can be found on the *Computer Arts Projects* disc 78 in the DiscContent\Tutorials\Tutorial Files\Low-fi art folder.

Part 1: Preparation

Prepare your photograph and other poster elements to be printed in greyscale...

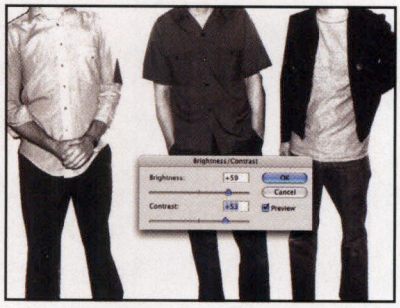
The Nein

We thought this band was the ideal subject to display an anti-technology technique. The Nein hails from the USA and its new album, *Wrath of Circuits*, has an inherent fear of technology about it. The band is signed to Sonic Unyon Records in Canada. If you'd like to hear the current album, check out the steaming audio at **[w]** www.sonicunyon.com

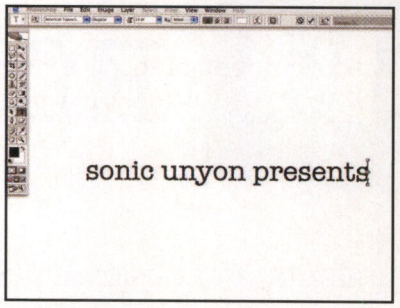


1 Open the neinphoto.jpg file from the disc. Also, create a new file the size of your standard printer paper. Use greyscale mode and a white background. Select the Polygonal Lasso tool and draw a rough selection around one of the band members in the photo.

2 Hold down the Ctrl/Cmnd key, click within the selection area and drag the band member to your greyscale image file. One by one, select each band member and drag him into the greyscale file. Resize or rotate them to fit within the page.

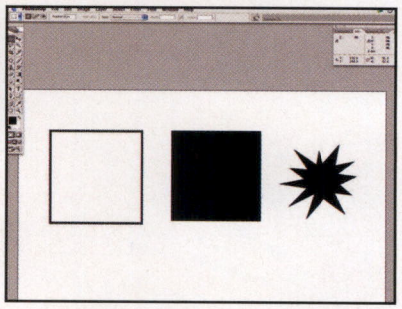


3 Choose Image>Adjustments>Brightness/Contrast from the menu. Increase the brightness and contrast so that the image details are prominent but there's less of a greyscale range within the image. Print it out when finished.



4 Open the neinlogo.jpg file and print it out at a small size in black-and-white. Create another greyscale image file at the size of your printed page – again, use a white background. Use the Type tool to type some of the text to be used on the poster.

5 Here, we used Stencil and American Typewriter as the fonts for the poster, but feel free to choose your own. Type in different shades of grey and even try typing white text against grey and black backgrounds on underlying layers. Print the page when finished.



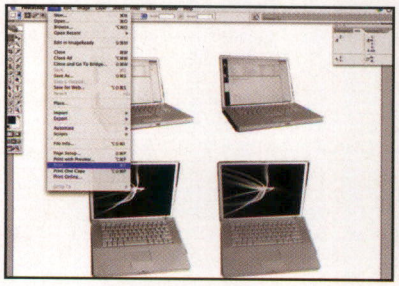
6 In another new greyscale file, use the Shape tool to draw a starburst from the custom shape menu, and choose a black fill. Then choose the Rectangular Marquee tool. Draw a square and fill it with black. Then draw another square and use the Edit menu to add a black stroke inside it.

Part 2: Photocopying

Once you've printed everything out, it's time to employ the photocopier...

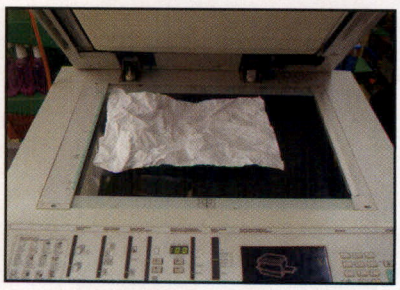
Lighten and darken

Almost every photocopier has a setting that allows you to lighten or darken the copied image. When you're copying the original, try using a very light setting so that a lot of the detail and tonal range is lost. Then try duplicating this initial copy with a darker setting, enhancing the contrast while retaining the reduced detail and tonal range.



1 Print the starburst file, then open the computers.tif greyscale image from the CD. Print the computers.tif image too. Once everything is printed, gather up the printouts and seek out a photocopier. Try to steer clear of companies that specialise in photocopying services.

2 Look for a corner shop with a photocopier that hasn't been maintained and hardly works. This will give you the rough results you're after. We managed to find this old photocopier in the back of a convenience store in downtown Toronto. It was perfect for our purposes.



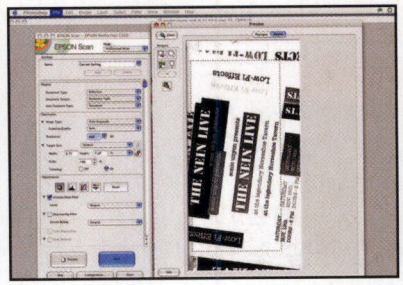
3 Photocopy each printout at least once. Then try copying the copy to further deteriorate the imagery. Take some of your copies and crumple them up. Flatten them out and photocopy them again. This creates a very distressed image, from not only the copied areas but the shadows too.

Photocopying continued...

Drag from file to file

When you want to bring selected scanned elements into the working file, you could copy them and then paste them. However, dragging is a much quicker method for getting selected elements into your working file. When you have selected something, hold down the Ctrl/Cmnd key, click inside the selection border and then drag from the current file into the desired file. The selected contents will be added to the destination file as a new layer.

4 When you've photocopied everything, crumpled up the photocopies and then photocopied all of your photocopies, gather up all the pages and head back home. Chances are you'll have more than you can use, so lay them all out on the floor and pick out the best of the bunch.



5 Once you've picked out your favourites, scan them, one at a time, in greyscale mode. Use a resolution high enough so that you don't have to increase the size of the scans too much within the poster composition. Keep all of your scanned image files open within *Photoshop*.

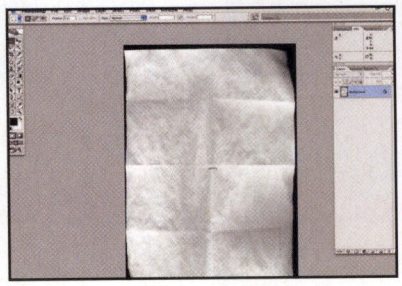
6 Before you go any further with your flyer, try to check out some local examples. If you live near a club district, have a look at some of the posters and flyers in situ. You'll notice that elements generally aren't cropped very well, and that registration is rarely accurate.

Part 3: Photoshop techniques

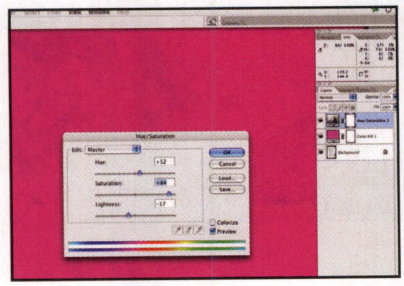
Now that you've got all your elements, it's time to piece everything together in *Photoshop*...

Channel options

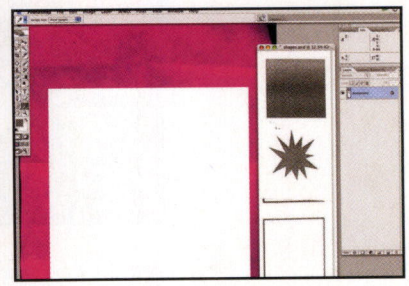
By default, the options in *Photoshop's* Channels palette are set so that stored selections behave in a certain way. Normally, selected areas appear as white, and masked areas appear as black within your channels. In this tutorial, we want to reverse that. Double-click an alpha channel icon to access the channel options. In this dialog box, change the colour indication to Selected Areas instead of Masked Areas.



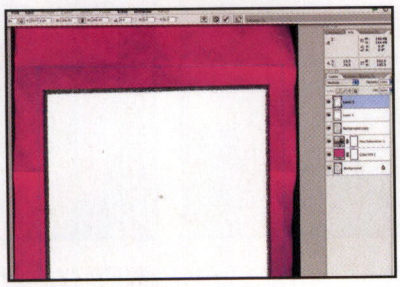
1 It's imperfections that give poster art an identity of its own. Try to take a mental snapshot of the club flyers you've seen and use it as your style guide when creating your poster in *Photoshop*. Open the paper.psd file from the disc.



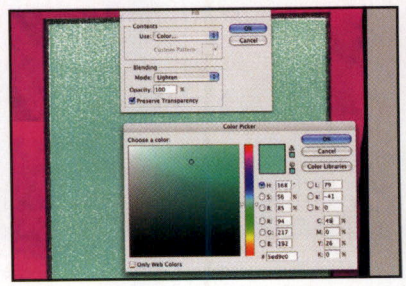
2 Create a new solid colour layer in the Layers palette and choose a bright pink colour from the picker. Change the blending mode to Multiply and reduce the Opacity to 88 per cent. Create a new Hue/Saturation adjustment layer. Greatly increase the Saturation, tweak the Hue and decrease the Lightness a little.



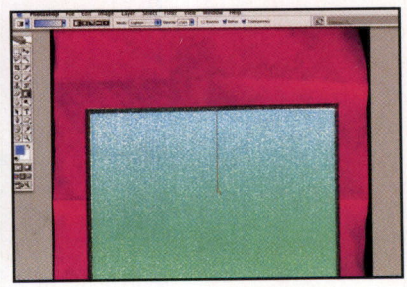
3 Duplicate the background layer, and change the layer mode to Multiply. Create a new layer and draw a rectangular selection with the Marquee tool. Choose Edit>Fill from the menu and fill the selection with white on the new layer. Open the image file that contains the scanned rectangle shapes.



4 Draw a rectangular selection around the outlined square. Drag the selected contents into your working file as a new layer. Change the layer mode to Multiply. Use Edit>Free Transform to increase the size of the square outline and position it around the existing white square.



5 Now draw a selection around the scanned solid square. Drag it into the image, increase the size, and adjust the position. Change the layer mode to Multiply. Choose Edit>Fill. Choose the Lighten blending option and Preserve Transparency. Select Colour under Use and select a light green colour from the picker.

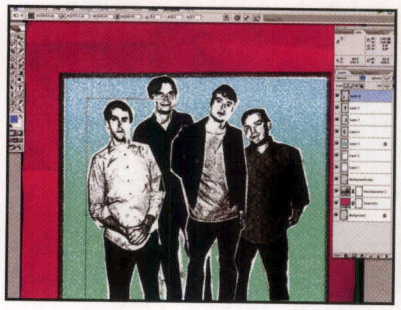


6 Choose a blue foreground colour and select the Gradient tool. Select the foreground to transparent preset and the linear gradient method. Choose the Lighten mode in the tool options bar and then lock the layer transparency in the Layers palette. Draw a gradient from the top of the square downward.

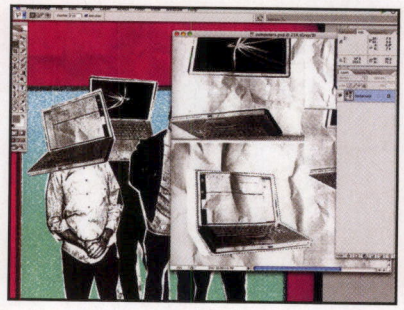
Photoshop techniques continued...

Poster reference

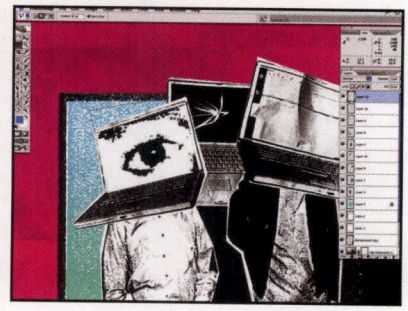
Wandering around a club district and looking at the existing posters will certainly provide ample reference in terms of technique. However, when it comes to innovative designs and superior artwork, you may find your local area lacking. Have a look at **[w]** www.gigposters.com to see thousands of different poster designs all in one place. You can even check out the multitude of other Nein poster designs.



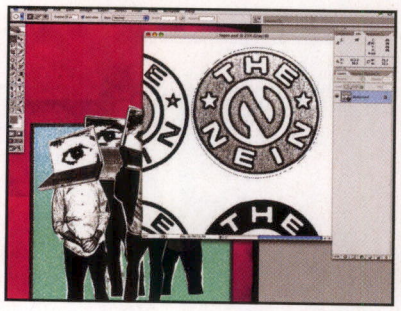
7 Use the Polygonal Lasso tool to roughly select one band member from the scanned image. Drag him into the working file as a new layer. Use Free Transform to rotate and resize him accordingly. This method can also be used to drag all of the band members into the working file on a series of layers.



8 Use the Polygonal Lasso and the same methods to select a photocopied laptop scan and drag it into the working file. Use Free Transform to adjust the size, and position it over one band member's head. Use this method to place a laptop layer over each band member's head.

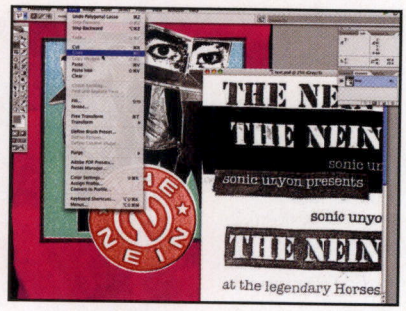


9 Select the image that contains the largest scanned band members. Use the Polygonal Lasso to draw a roughly rectangular selection around a single eye. Drag it into the working file as a new layer, use Free Transform to resize and position it properly, and select and delete any unwanted overlapping areas.

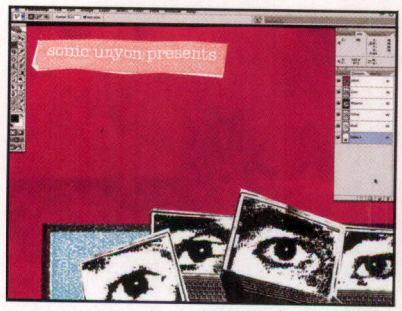


10 Repeat this process until each band member has a large eye on his laptop screen. Move the eyes up and down within the Layers palette as required. Open the scanned image that contains the Nein logos, and use the Elliptical Marquee tool to select a logo that isn't solid.

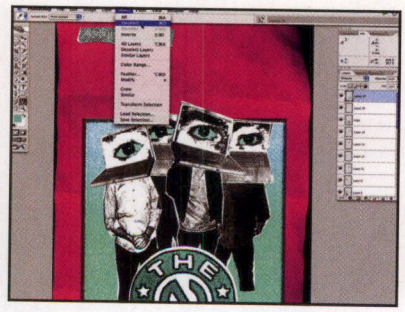
11 Drag the selected logo into your working file as a new layer, position it at the top of the Layers palette, adjust the size, and position it a little lower than the centre of the image. Create a new alpha channel in the working file and enable the visibility of all channels.



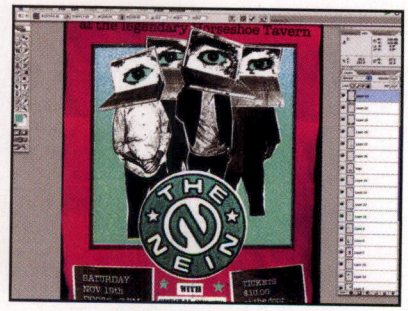
12 In the scanned image file, select a solid logo and copy it. Paste it into the alpha channel in your working file. Position it so that it overlaps the other logo in the image. In the scanned text file, use the Polygonal Lasso to select the 'sonic unyon presents' box and copy it.



13 Paste it into the alpha channel in your working file and position it in the upper-left corner. With the selection still active, create a new layer and fill the active selection with white on that layer. Deactivate the selection and return to the alpha channel. Enable the visibility of the colour channels.



14 In the alpha channel, use the Polygonal Lasso to draw a shape that overlaps each eye and fill it with black. Generate a selection from the channel and create a new layer with a Multiply blending mode. Fill the selection with a teal-blue foreground colour and deselect.



15 Drag the selected 'sonic unyon presents' black text into the working file as a new layer. Resize and position it over the box at the upper left. Use this method to add all of the text to the poster, change blending modes to Multiply as desired. Finally, feel free to add stars and starburst shapes to complete your flyer. **ca-p**

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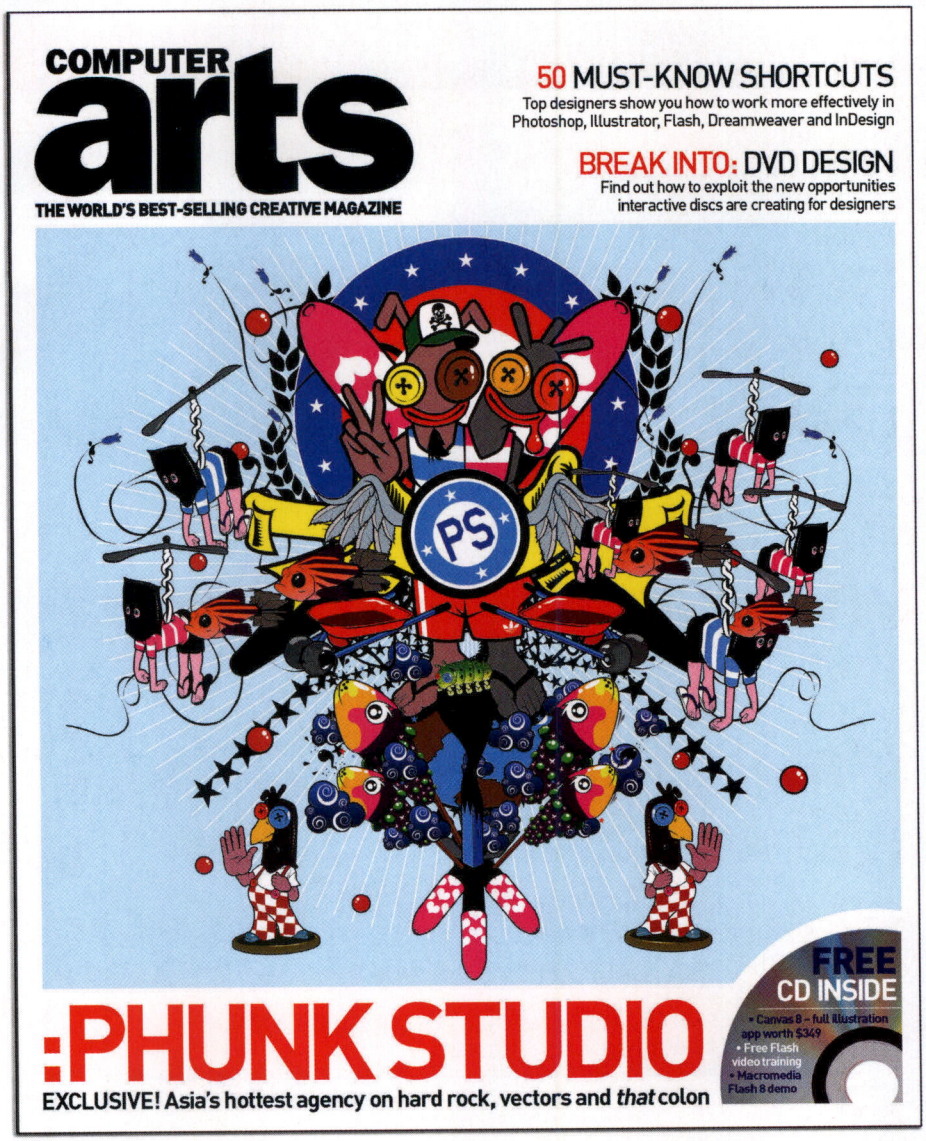
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15 years of PHOTOSHOP

Discover the hidden surprises inserted by Photoshop's developers...

Easter Eggs are essentially hidden features within programs, usually inserted by mischievous (or bored) developers trying to brighten up the tedium of ploughing through thousands of lines of software code. *Photoshop* has had more than its fair share...

ALTERNATIVE SPLASH SCREENS

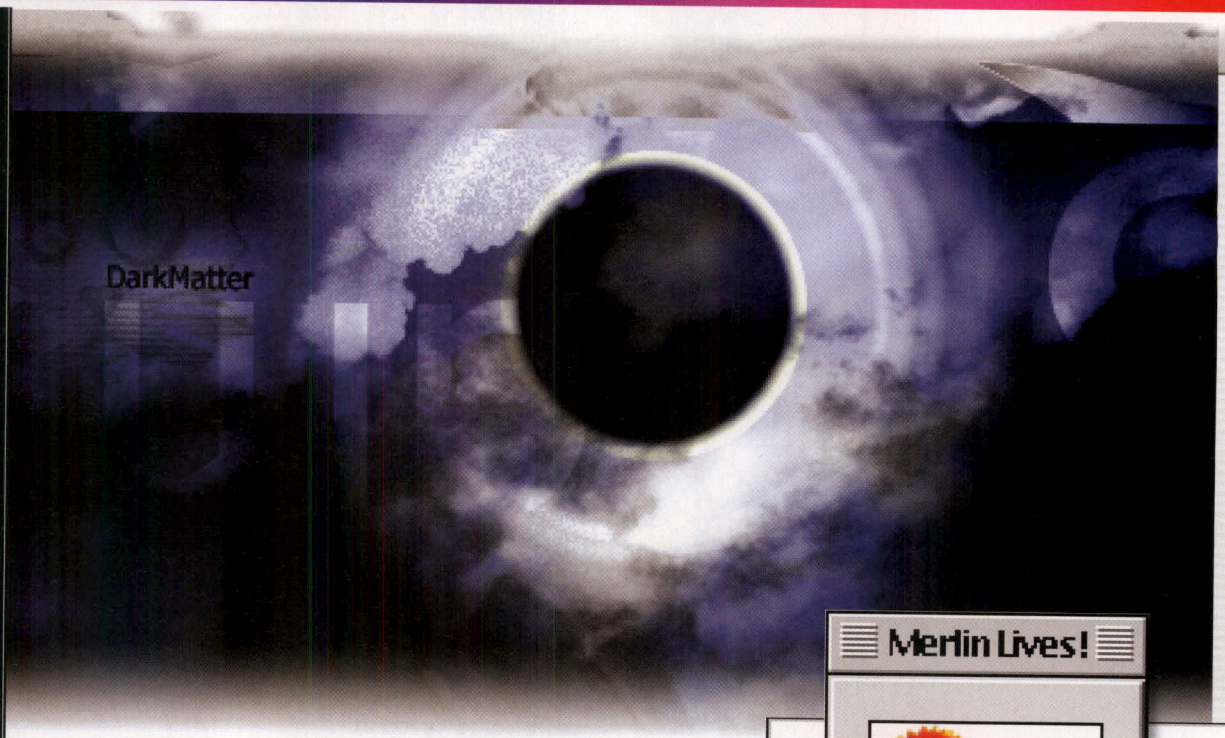
We've looked at how the *Photoshop* splash screen has evolved over the years, but perhaps the best known *Photoshop* Easter Egg is the alternative splash screen. This can be displayed by holding down the Cmnd key on a Mac or the Ctrl key on a PC to reveal the splash screen from the beta, complete with its codename.

MERLIN MANIA

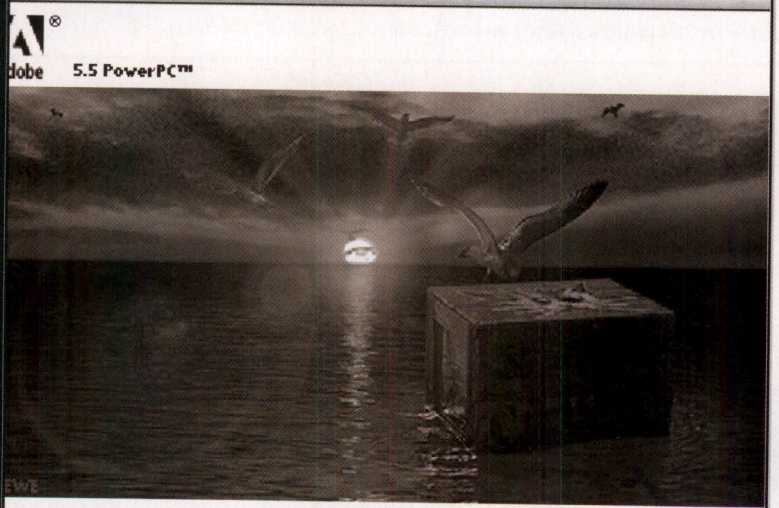
Did you know that a little wizard called Merlin lives in the *Photoshop* Layers palette? Hold down the Option key on a Mac or the Alt key on a PC and click on the arrow in the top corner of the Layers palette. Select Palette Options and Merlin will appear, complete with a rather unusual plant.

RUBBER DUCKS

Photoshop's companion program *ImageReady* also contains Easter Eggs. Hold down the Option/Alt key while clicking on the image of the feathers above the Tools palette in *ImageReady CS* and it'll change to a ship – the image used for the hidden 'Taconite' splash screen. Better still, reveal the hidden splash screen by holding the Cmnd or Ctrl key down and selecting About ImageReady. Now hold down the Cmnd or Ctrl key and click on the Taconite screen to make rubber ducks appear. Hold down the Cmnd and Option keys to reveal crosshairs and click on the ducks to remove them.



Interesting! No wait, the other thing - tedious.
Julie Meridian
International UI Design: Lynn Shade
Common User Interface: Bill Bachman, Bob Murata, Mariss
Visual Design: Steve Sanchez, Jorge Tello, Rachel Kane, Fr
Chris Smith
User Research: Sheryl Ehrlich, Grace Kim, Leah Lin
Technical Writing: Dave Valiulis



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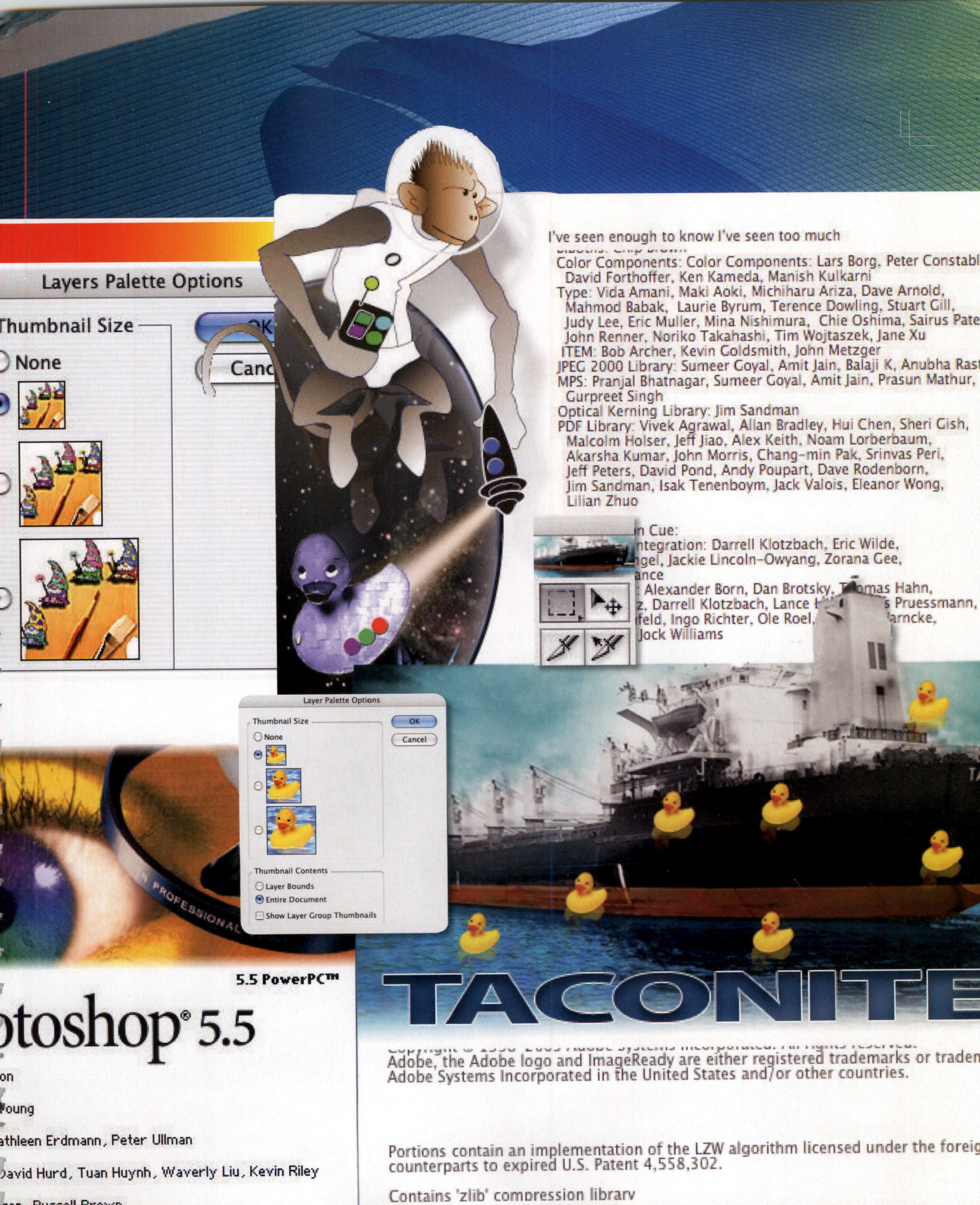
Other Goddess of the Tenth Floor: Debbie
Legal Mumbo-Jumbo: MeMe Rasmussen, K
Special Projects: Luanne Seymour Cohen,
Creative Input: Jeff Schewe, Stephen John



I've seen enough to know I've seen too much

Color Components: Color Components: Lars Borg, Peter Constabl
David Forthoffer, Ken Kameda, Manish Kulkarni
Type: Vida Amani, Maki Aoki, Michiharu Ariza, Dave Arnold,
Mahmod Babak, Laurie Byrum, Terence Dowling, Stuart Gill,
Judy Lee, Eric Muller, Mina Nishimura, Chie Oshima, Sairus Pate
John Renner, Noriko Takahashi, Tim Wojtaszek, Jane Xu
ITEM: Bob Archer, Kevin Goldsmith, John Metzger
JPEG 2000 Library: Sumeer Goyal, Amit Jain, Balaji K, Anubha Rast
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ntegration: Darrell Klotzbach, Eric Wilde,
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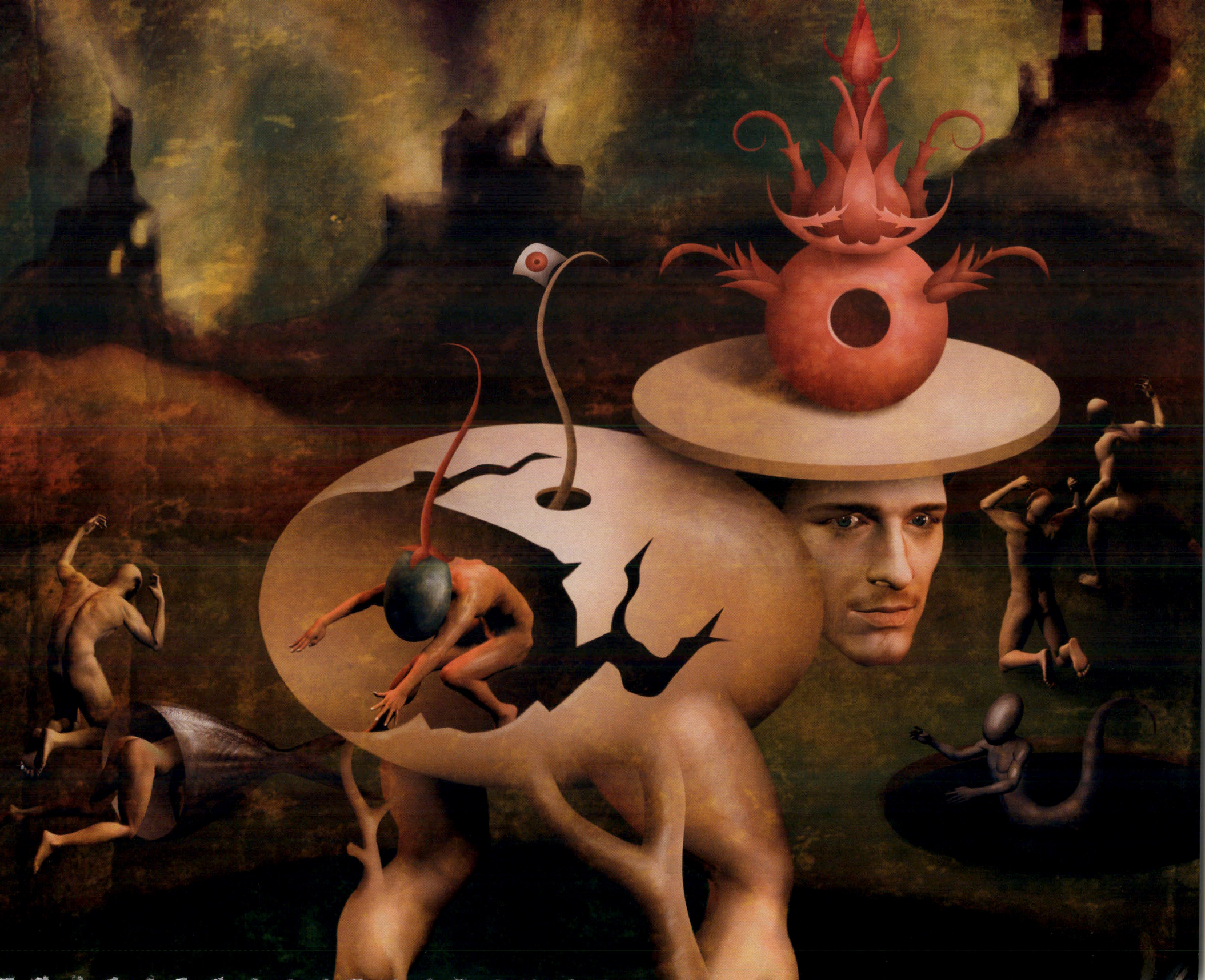


Tutorial

[illustration] Derek Lea [w] www.dereklea.com

Create a digital old master

Combine *Poser 6* and *Photoshop* to create this stunning image of hell, inspired by the infamous paintings of Hieronymus Bosch…

The inspiration for this image is the third panel of the renowned triptych 'The Garden of Earthy Delights' by Hieronymus Bosch. It's a painting that shows man in paradise, then succumbing to temptation, and then the final hellish results, which we've re-imagined here. The original painting's combinations of human figures with shapes, set against a two-dimensional painted background, make it an ideal style to mimic with our chosen digital tools.

Poser 6 provides all you need to render a series of stunning figures with minimal effort. If you're a *Poser* sceptic, take a good look at the large face on the main figure. This is a default *Poser* figure – all that we did was pose and render it. It would seem that the folks at Curious Labs have finally got things spot-on in *Poser*, making it an essential tool for this sort of semi-realism, and something the pros will have more and more difficulty dismissing as time moves on.

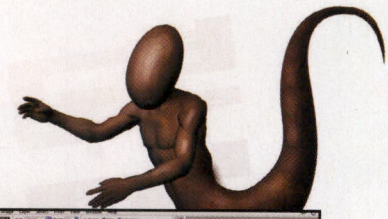
Everything else required lies within the *Photoshop* toolset. In creating this image, we've used *Photoshop* as a paint tool, not an image-editing tool. If you have a traditional art background, you'll instantly recognise the procedure of defining areas of colour, shading them, and then adding detail. If you're new to painting, you'll be pleasantly surprised at how easy the process becomes with *Photoshop*. Follow through the next few pages and you'll soon realise that the true power of modern tools is the ability to create something that bears no signature of the software used, and is simply perceived as a piece of timeless and compelling art.

Expertise provided by Derek Lea, an award-winning illustrator based in Toronto, Canada. See more of his work at [w] www.dereklea.com.

The files you need to complete this tutorial can be found on the *Computer Arts Projects* disc 78 in the DiscContent\Tutorials\Tutorial Files\Bosch folder.

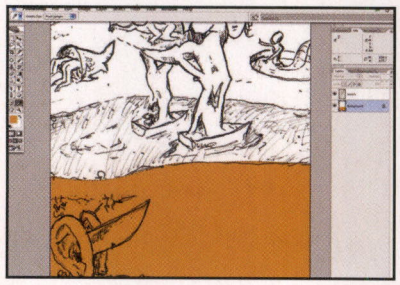
Part 1: The background

Create the background by defining and filling areas with colour...

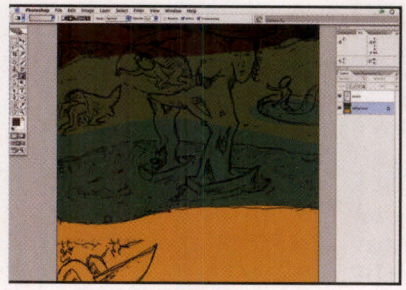


Foreground to transparent

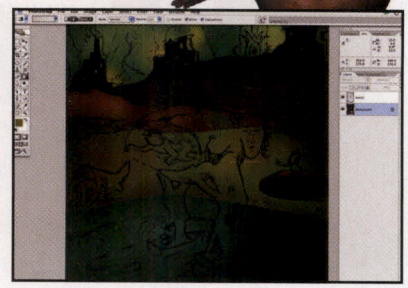
This is arguably the most useful gradient preset. Choose it from the gradient picker in the tool options bar and leave this as your gradient preset for the duration of this tutorial. The main advantage to using this preset is that there is no automatic background fill applied when you create a gradient. This enables you to build up gentle gradients of colour on top of existing imagery within the confines of a selection border.



1 Open the working.psd file and select the Pen tool. Target the background layer and use the visible sketch layer as your guide to draw a series of paths surrounding each of the different background regions. Generate a selection from one path and fill it with a solid colour on the background layer.



2 Use this same method to generate selections from individual paths, filling them with different colours selected from the picker. Save your paths by naming them so that you can access them for the next step. When you've filled all the areas with solid colour, select the Gradient tool.



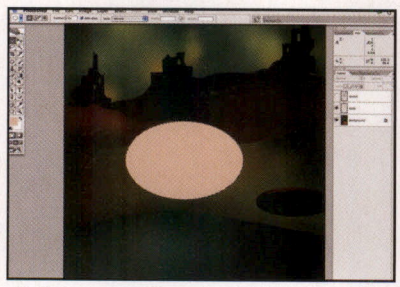
3 Select your flat areas one by one, and use the Radial Gradient tool, set to 'foreground to transparent', to introduce a variety of different coloured gradients. Choose colours that accurately represent highlights and shadows. Vary the size and opacity of the gradients as you create them.

Part 2: Creating shapes

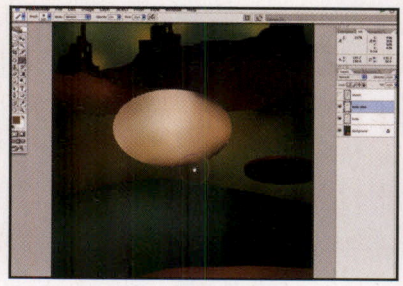
Create areas of flat colour and add dimension using shading techniques...

Path advantages

There are a number of advantages to using the Pen tool to trace the areas you wish to select. You can generate a precise and sharp-edged selection from any path by simply Ctrl/Cmnd-clicking on it in the Paths palette. Paths are always editable, so you can add, delete, or edit points at any time. You can also save paths by simply naming them anything other than 'work path' so it remains in the Paths palette if you wish to reload a selection later on.

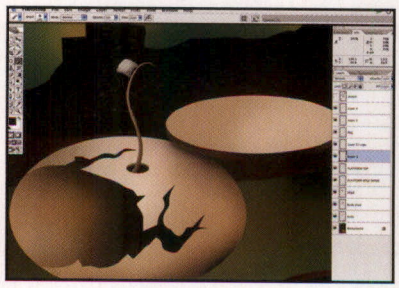


1 Create a new layer underneath the sketch layer. The sketch layer will act as your guide, so feel free to turn it on and off as needed. Use the Elliptical Marquee tool to draw an ellipse selection for the main body shape and fill it with a flesh colour on the new layer.

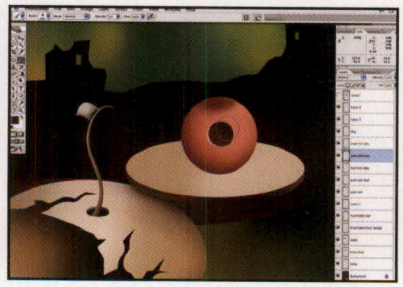


2 Create a new layer and keep the current selection active. Select the Brush tool. Choose a large, soft, round brush tip preset and specify a low opacity setting. Use the brush to paint a variety of darker flesh colours, adding shading, on the new layer. Create a new layer.

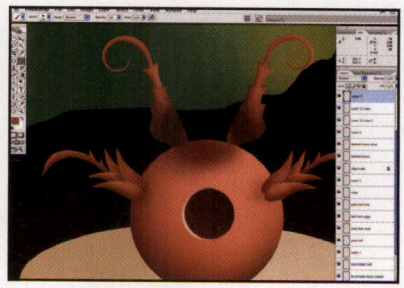
3 Use the Pen tool to draw a closed path representing the cracked opening. Generate a selection from the path and fill it with a darker flesh colour. Then use the Radial Gradient tool combined with the Brush tool to introduce darker colours into the selected area, creating the illusion of depth.



4 Use this method to create other shaded portions of his body across multiple layers. Fill an elliptical selection with flesh, creating his head platform. Use the Pen tool to draw the shape of the platform edge, selecting then shading it. Also create the flag, flagpole and hole using this method.

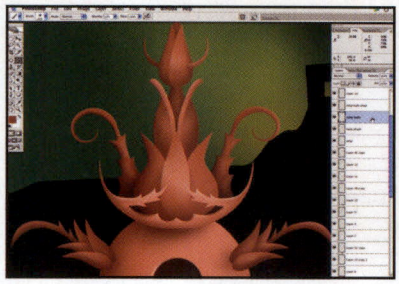


5 On another layer, use the Elliptical Marquee tool to draw a circle on top of the platform. Fill it with pink and then use the Brush tool to paint the necessary shading on another layer. Then draw, fill, and shade the hole and hole edge shapes on a series of layers.

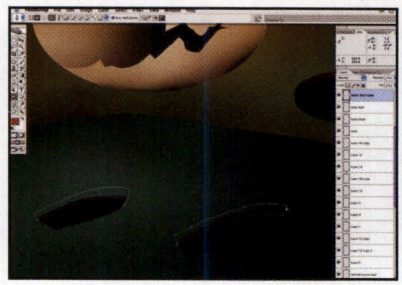


6 The elaborate pink object is really just the result of using this technique over and over again: drawing an interesting shape with the Path tool, generating a selection from the path, filling the selection and then painting some shading into the selection across multiple layers.

Creating shapes continued...

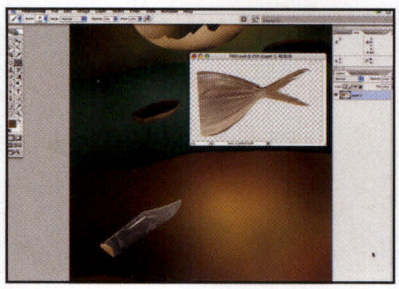


7 In some cases, layers can be merged, duplicated and flipped horizontally to create a mirror image of an object detail on the opposite side of the object. You can also move your layers up and down in the Layers palette, placing certain details in front of, or behind, others.

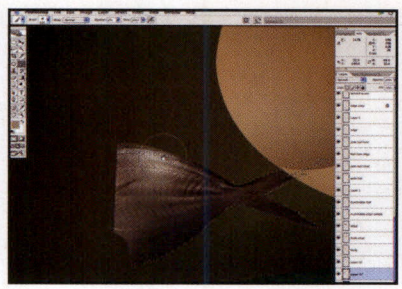


8 Again, the same methods are used to create the boats in the water. First, use the Pen tool to draw the shapes for the boat bottoms, then fill the path-based selections with a dark colour on a new layer. Use the pen to draw their inside edges.

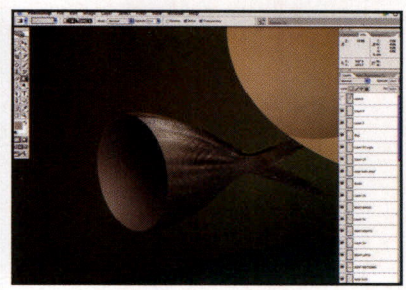
9 Generate a selection from the paths and fill it with brown on a new layer. Then apply shading within the selection. Repeat this entire process to create the right sides and backs of the boats, applying different brown colours and painting shading into the selections when they're active.



10 Open the blade.psd file from the disc and drag the layer into your working file. Use Edit>Free Transform to rotate it and distort the proportion of the blade. Place it in the lower left of the canvas area and then press Enter to apply the transformation. Open the fish.psd file.



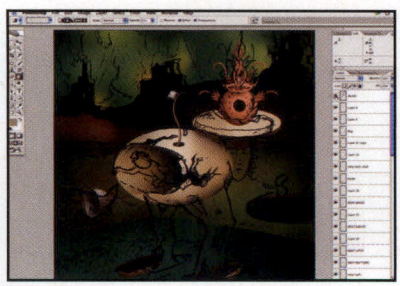
11 Drag the fish layer into the working file and place it below the body. Use Free Transform to adjust the size and rotation. Ctrl/Cmnd-click the layer icon to generate a selection from the layer contents. Paint shading over the fish inside the selection on another new layer.



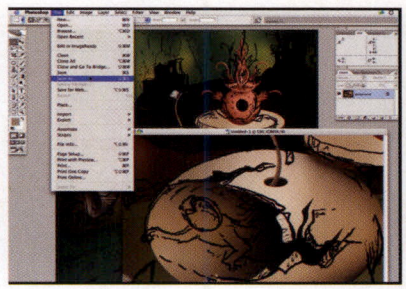
12 Draw an elliptical selection over the front portion of the fish and fill it with grey. Use the Gradient tool alongside the Brush tool to add darker colours inside the selection until it appears hollow. Deactivate the selection and then enable the visibility of the sketch layer.

Part 3: Preparing for Poser

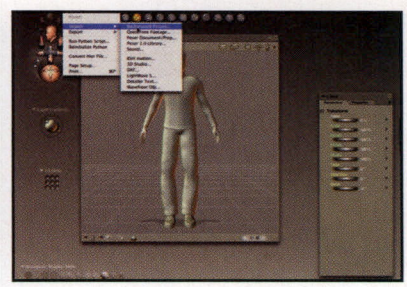
Create a background for the incorporation of your *Poser* figures...



1 In many cases, it's useful to create a background for individual *Poser* models, to accurately match lighting and then incorporate the models into the *Photoshop* scene. Enable the visibility of the sketch layer if you think it will prove helpful. Then you can take screen snapshots or create a number of flat background files.



2 If you're using screen snapshots, zoom in on the areas where individual figures are required and take snapshots of each area. If you're creating separate files, you'll need to create a second, flattened version of your working file for this purpose only, preserving the layered file. Use the Rectangular Marquee to select specific areas, then paste them into individual files.



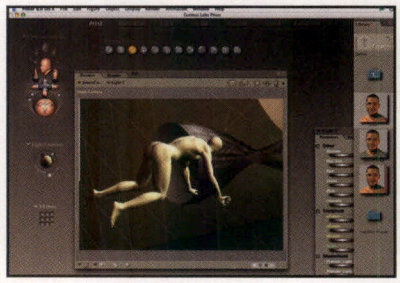
3 When you've created and saved your background files, launch *Poser 6*. You can place your background files into *Poser* scenes by choosing File>Import>Background Picture from the menu. For every figure in this image you can use the James figure that ships with *Poser 6*. Be certain to use the nude version.

Part 4: Poser figures

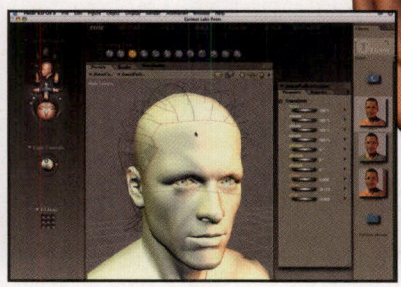
Create figures that appear as if they belong in your *Photoshop* scene...

Poser files

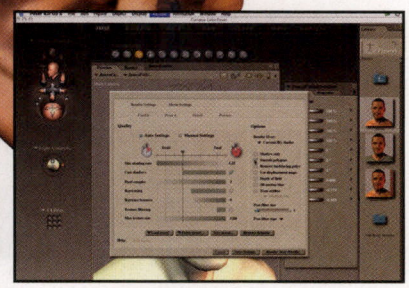
If you don't have a copy of *Poser 6*, you may wish to look into getting a copy of *Computer Arts* issue 114. There is a demo version on the CD that comes with that issue. Turn to our back issues service on page 89. If you can't get hold of *Poser*, we've included the finished renderings used in this illustration as separate .psd files on this issue's disc. And if you want something to start with when using *Poser*, we've also included all the necessary *Poser* files that you can investigate and render on your own. And finally, there is a selection of background images to import into your *Poser* files on the disc as well.



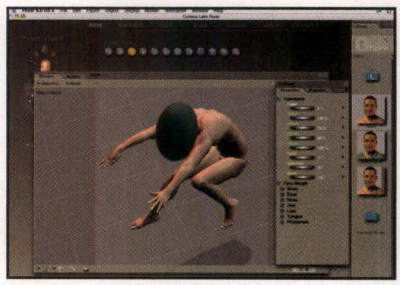
1 Each specific background picture is helpful. Here, the figure is posed and adjusted so that he looks as if he's crawled into the fish at the proper angle. The image is also used as a reference when adjusting *Poser*'s lighting controls so that the direction of light matches that in the background.



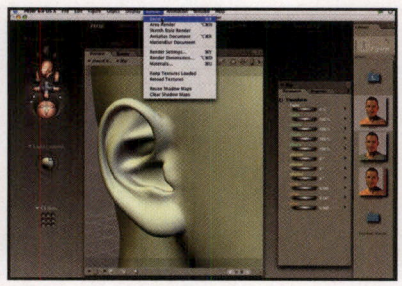
2 Once you've matched the lighting, pose and angles properly with the assistance of the background picture, you can remove it from view in the Display menu. This allows you to work on each figure in a less cluttered environment before you decide to finally render it.



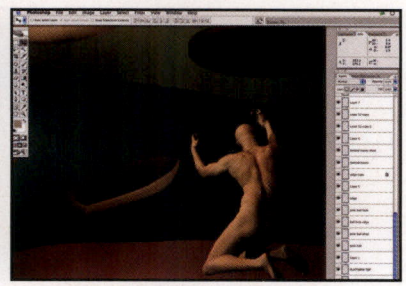
3 When you're finished with each figure, render it and then export the rendered image file. Ensure that you choose the Smooth Polygons option in the Render Settings dialog box. Also ensure that you enter a resolution in the Render Dimensions dialog box that is high enough, to avoid unnecessary size increases back in *Photoshop*.



4 Some figures, such as the creature in the pond or the man trapped inside the main figure, have their heads replaced with props within *Poser*. Then the new heads are distorted before rendering. In the case of the trapped man, the colour of the prop was changed to blue.



5 In the pond creature's case, his skin and head prop were coloured grey before rendering. Also, the main figure's legs were distorted greatly before rendering. For the ears at the bottom left of the image, we rendered a single, close-up ear that was duplicated and edited within the final image.



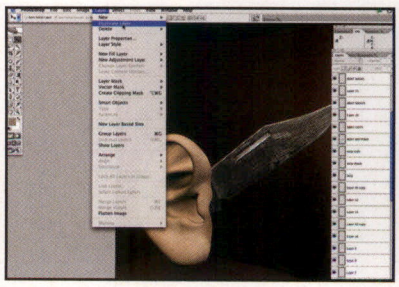
6 When the rendering is finished, open a rendered figure in *Photoshop*. Each finished *Poser* rendering has an alpha channel within the file that, when Ctrl/Cmnd-clicked on in the Channels palette, enables you to accurately select your rendered figure. Use the Move tool to drag your selected figure into the working file as a new layer.

Part 5: Positioning figures

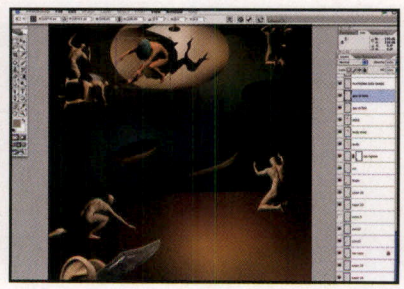
Place each figure in an individual layer, then position them in the composition...

Blending paint

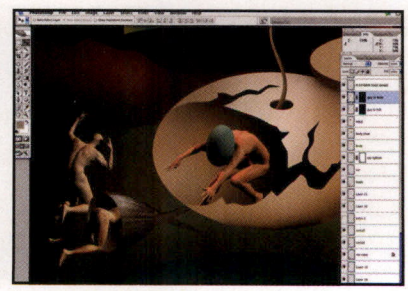
You'll notice in this section that brush strokes are painted over brush strokes on a series of layers to gently blend the paint together. This gives a very authentic-looking result if you take the time to do it properly. With every layer you paint, reduce the opacity of the brush slightly, and ensure that you sample the underlying colours. Never, ever use the Smudge tool to blend brush strokes when creating an effect like this, because it will smear the pixels together, destroying the authenticity of the effect.



1 Drag all of the outer figures into the file as new layers. Use Free Transform to individually size and rotate all figures, then draw a path around the ear rendering, select it and drag it into the image. Position it over the blade. Then duplicate the layer and drag it beneath the blade layer.

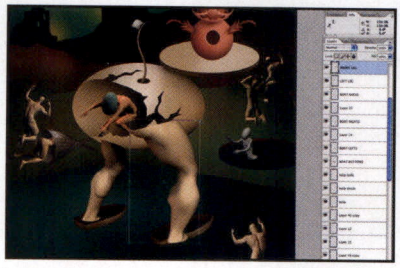


2 Move the duplicate layer to the right, enable the transparency lock, and then paint over the ear using colours sampled from it, to hide the detail. Drag the imprisoned figure and the figure hiding in the fish into the file as individual layers. Resize and position them in their proper areas.

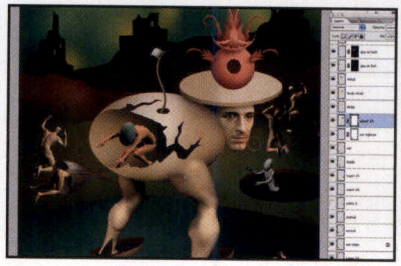


3 For the imprisoned figure, keep his layer targeted, but Ctrl/Cmnd-click the layer that defines the shape of the hole to generate a selection from it. With that selection active, click on the Add Layer Mask button to mask the targeted layer. Target the guy in the fish layer and do the same thing, using the underlying ellipse layer.

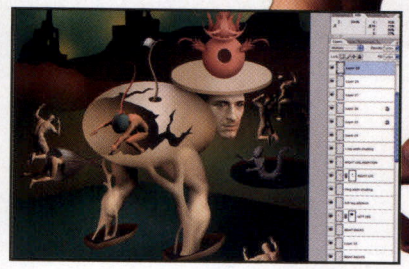
Positioning figures continued...



4 Bring the rendered creature figure into the working file, resize and place him over the pond area at the right. Then use the same method you used with the ear, to isolate each rendered leg and bring them into the working file as new layers. Resize them, and position them properly in the Layers palette as well as within the scene.



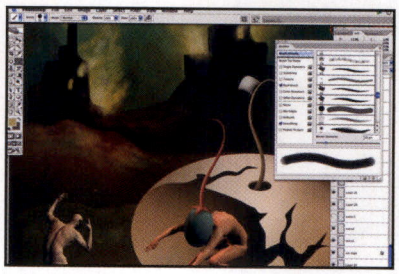
5 Add a layer mask to each leg. Mask the areas on the left leg that overlap the body. Edit the right leg layer mask with a soft brush so that it blends into the body shape. Bring in the head rendering, drag it below the body layer, resize it and mask out any unwanted areas using a layer mask.



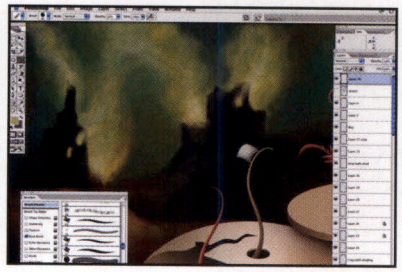
6 Finally, use the methods you learned earlier for creating and editing shapes to create, on a number of layers, the following: twigs and doorways that overlap the main figure's legs and blend into his body via layer masks, a tail for the creature, a sprout, and leaves emanating from the trapped figure's head.

Part 6: Paint effects

Now you need to add a painterly and tactile feel to the image...



1 Create a layer and drag it just above the background layer in the Layers palette. Select the Brush tool and choose the wet sponge brush tip preset. Disable the Wet Edges option in the Brushes palette and paint a small strokes on the layer using a variety of colours and low opacity settings.



2 Next, create a second layer and paint over the existing brush strokes on the new layer, using even lower opacity settings. Frequently press down the Alt/Option key to temporarily access the Eyedropper tool and sample underlying colours as you go. Create a new layer again and drag it to the top of the Layers palette.

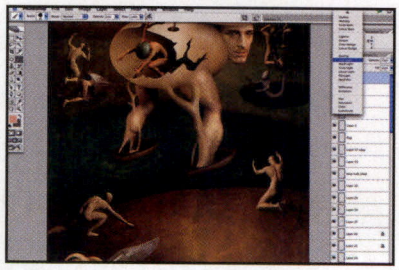
3 Reduce the size of the brush, and sample colours from underlying objects such as the pink organic plant object and the boats. Use the sampled paint colours to paint stokes over these objects so that there's a subtle brush stroke here and there on the surface of the image.

Part 7: Surface textures

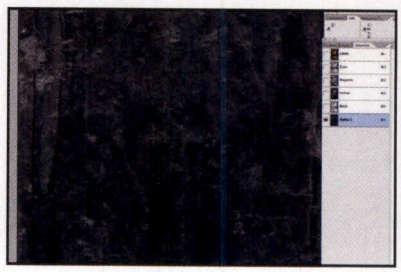
A simple desktop scan can add centuries of age and deterioration...

More Bosch

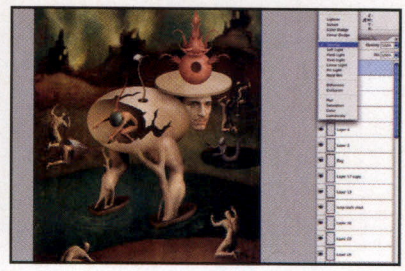
Just type **Hieronymus Bosch** into any search engine and you'll find all sorts of reference material on the internet. Perhaps the most surprising modern incarnation of Bosch's imagery is in the form of collectable figures. A number of them are taken directly from the 'Garden of Earthly Delights' triptych. If you're thinking you'd like to set one on top of your monitor, point your web browser at **[w]** www.nationalgallery.co.uk/boschfigurines.



1 Open the 'aged book scan.psd' file. Use the Move tool to drag the image into your working file as a new layer at the top of the stack in the Layers palette and position it so it covers the entire canvas. Change the layer blending mode to Soft Light and reduce the opacity to 53 per cent.



2 Type Ctrl/Cmnd+A to select the entire layer and copy it. Then create a new channel in the Channels palette and paste it into the new alpha channel. Ctrl/Cmnd-click the alpha channel thumbnail to generate a selection from the contents of the channel.



3 Create a new layer in the Layers palette. Fill the active selection on the new layer with a light yellow colour. Deactivate the selection (Ctrl/Cmnd+D) and change the blending mode of the layer to Overlay, ageing your image by a few centuries by simply distressing the surface. ca-p

Graduate showcase

We bring you the best of the entries to the 'Win a commission' competition run in the Design Graduate Special Edition of *Computer Arts Projects*...

In *CAP* 75, we invited recent design graduates to submit their best illustration work, with the prospect of a guaranteed commission in the magazine for the winner. The standard of entries we received was pleasingly high, reflecting a varied set of influences ranging from cutting-edge graphics to avant-garde sculpture. While many graduates had strong single images, a handful stood out for their ability to produce high-quality work on a consistent basis. We'll be commissioning our winner (see page 86) to produce an illustration for an upcoming article, but don't be surprised if you see a few more of these names reappear in future issues as well!

Claire McMahon

East Horsley, Surrey

Constructed in *Photoshop CS2*, 'Death of a Pin-Up' (right) is a personal project that mixes vintage illustration with contemporary graphics. "How is it possible that certain looks are in vogue throughout history?" asks Claire.

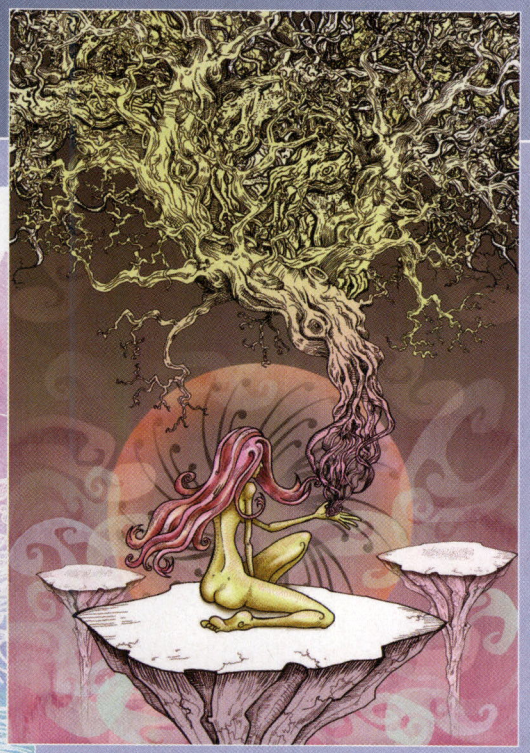
[w] www.clairemcmahon.com

Nick Street

London

Nick offers a variety of illustration, of which the detailed scrawl of 'Tattoo Land' (right) is the most successful. "An image that drove me mad from not limiting my layers as much as possible in *Photoshop*," says Nick. "A lesson learned."

[w] www.nickstreet.co.uk

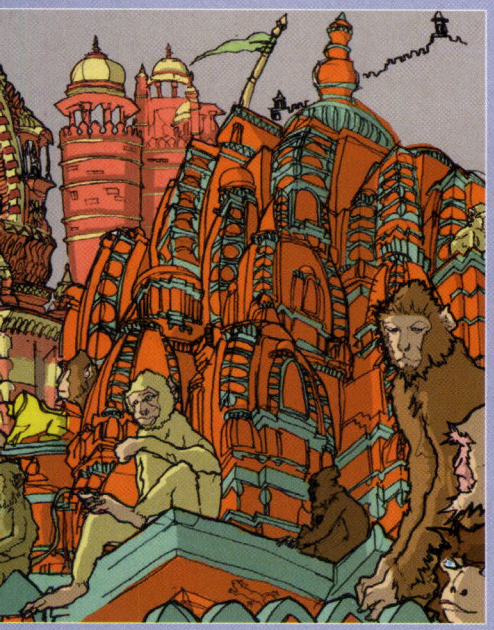


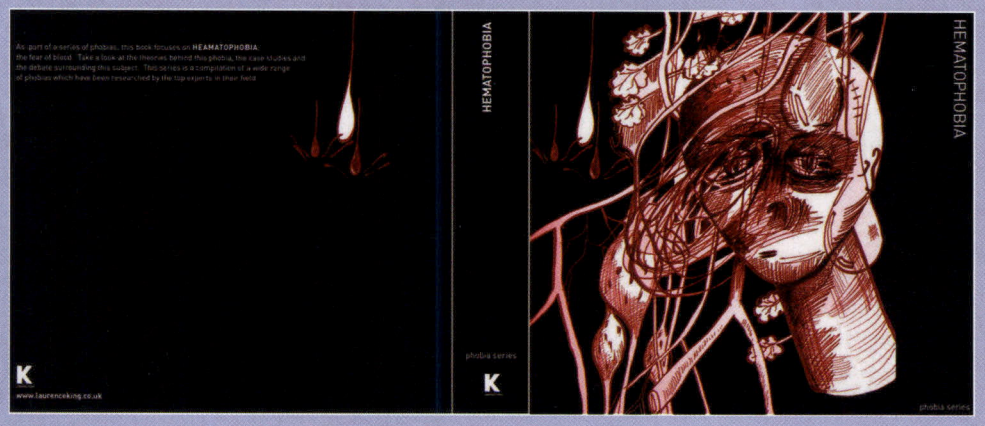
Steven Topley

Ilkeston, Derbyshire

Steven's work achieves its impact through crude drawing to win immediacy, and subtle layer work in *Photoshop*. 'Fashion Illustration' (left) borrows from rock iconography and other familiar symbols, such as the Statue of Liberty.

[e] stebruce2000@yahoo.com




As part of a series of phobias, this book focuses on HEAMATOPHOBIA
the fear of blood. Take a look at the theories behind this phobia, the case studies and the debate surrounding this subject. This series is a compilation of a wide range of phobias which have been researched by the top experts in their field
K
www.laurenceking.co.uk
HEMATOPHOBIA
phobia series
K
HEMATOPHOBIA
phobia series

Cherry Wynn-Williams

High Wycombe, Bucks

Cherry has created a series of covers for a range of books dealing with phobias. This illustrative style combines both a dramatic and an emotive essence. It was important to define the continuity between covers and the different areas of phobias that needed to be depicted.

[e] cherrywynn_williams@yahoo.com

Graduate showcase

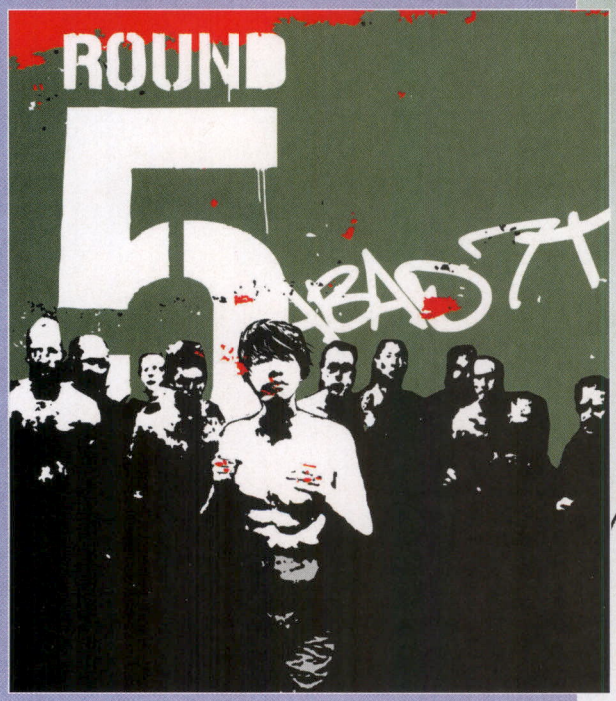
Pornpol Sanosana

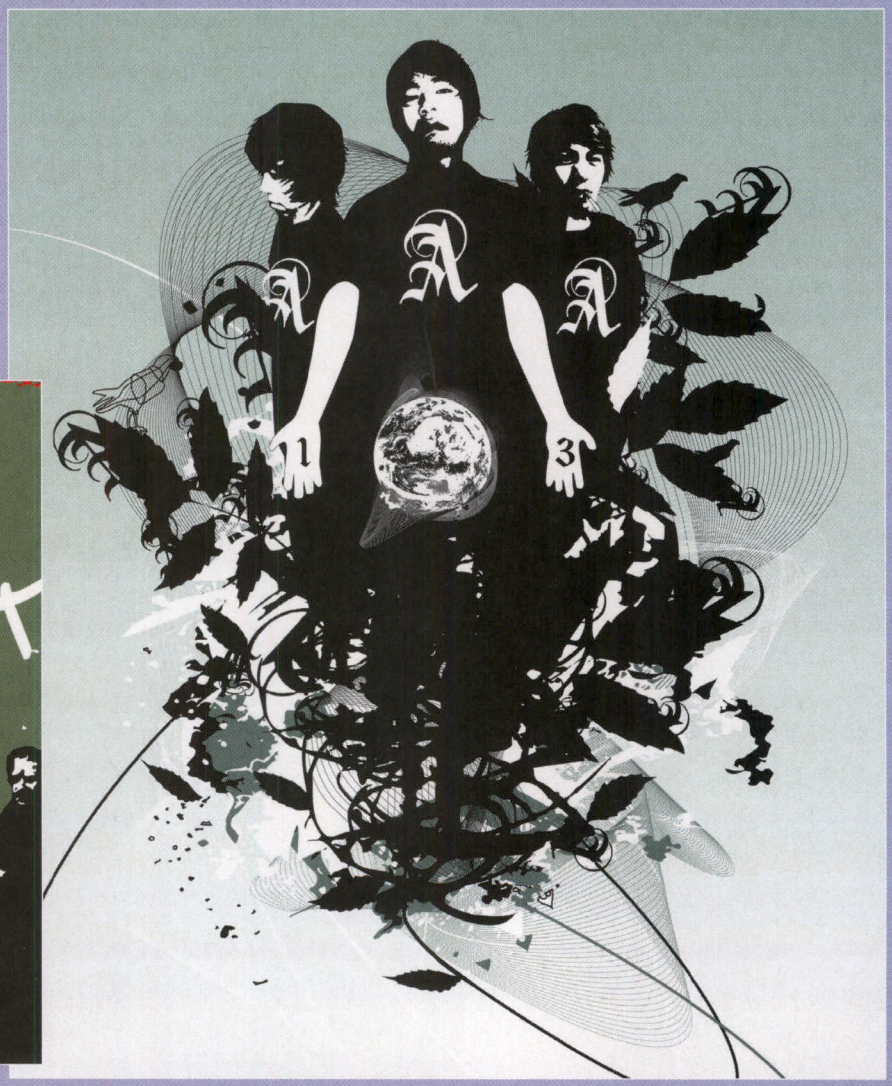
Bangkok, Thailand

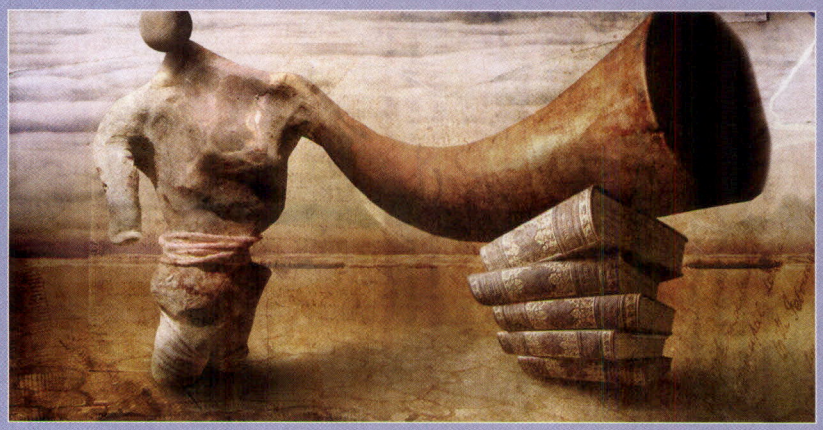
Pornpol offers barely any comment or context for his work – but then, pieces produced to the standard of 'AAA' (right) speak for themselves. Deploying silhouette and negative space with dramatic effect, the poster was produced in *Illustrator*. The maze of background lines and spirals reinforce the central image rather than distract from it – the work of someone who understands composition.

Pornpol's other pieces fell short of this benchmark, although 'Boxing' (below) is arresting in its directness. "I like boxing," Pornpol says of this, simply.

[e] abad7tv7@yahoo.com







Andy Hixon

Stockport

Influenced as much by sculptors as computer artists, Andy's highly textured work doesn't start on a PC at all: "Most of my work on the computer is applying texture to figures I have modelled out of clay and photographed, adding age and grain to the image, and for composition," he says.

Commissioned for band The Doppler Shift, 'Landscape 5' (left) was used on the inside of a CD cover. Andy says the group came up with the basic concept for the piece. "They contacted me when they saw my slightly surreal style and asked me to do 'a figure with some sort of amplification device strapped to the figure on a bleak landscape'. I still have no idea why..."

'Final Bitch 5' (right) was produced for Andy's degree show: "It was rendered two metres long and kept crashing my computer. The biggest difficulty I had with this image was getting the clay bodies and the human hands to match."

[e] andyhixon@fsmail.net

Tao Jiang

Toronto, Canada

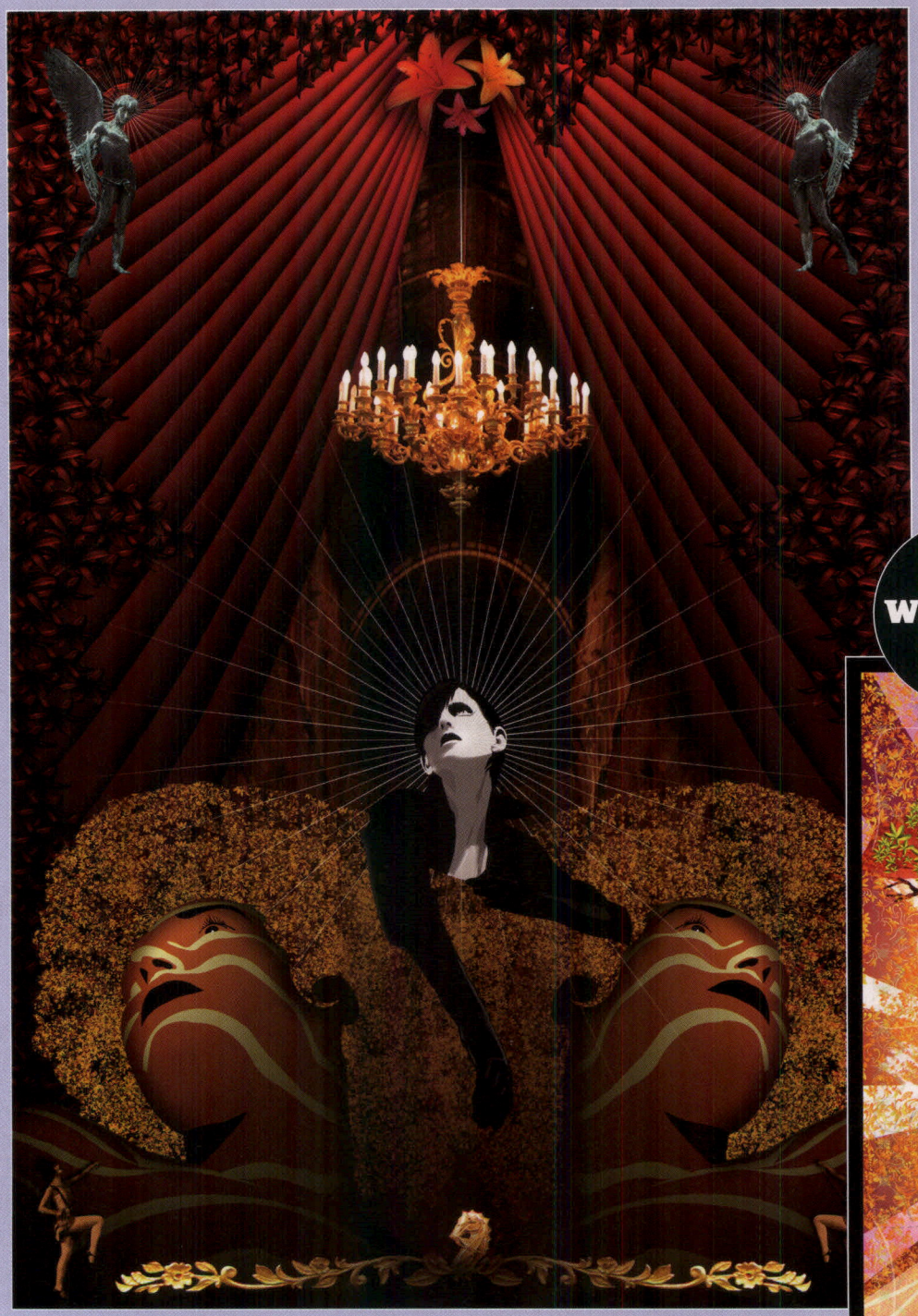
Tao's work combines 2D and 3D space in highly accomplished pieces. Here's an illustrator who is ready for commission, straight out of college. If there's a criticism to be made, it's that the work arguably follows current trends a little too closely, and a truly individual sensibility has yet to establish itself.

'Cherry Blossoms' (right) is perhaps the strongest visual. "I created this piece while I was listening to songs by Wand Fei, my favourite singer," says Tao. "All the songs in the album are about random encounters and almost hopeless love. I was trying to capture a feeling more than a specific image."

Tao moved to Canada from China, and the twin cultures of east and west merge in 'Insect Life' (inset), one of a series of postcards. "I combined my Chinese painting, graphic design and 3D skills in one piece. The little chickens symbolise the growing self and a bright future. When they become roosters one day, they can finally use all their skills and knowledge to make themselves shine," says Tao.

[e] jiangtao1000@hotmail.com

Graduate showcase



Kosmas Apatagelos

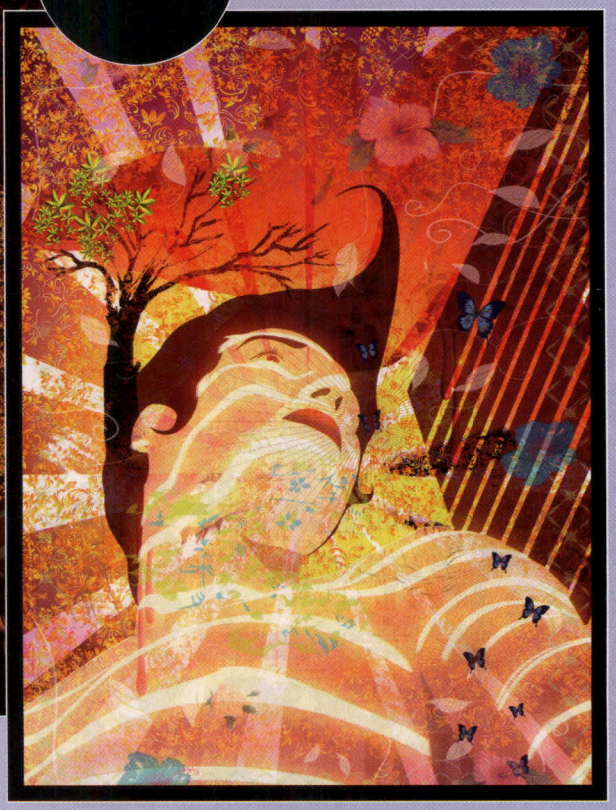
Patra, Greece

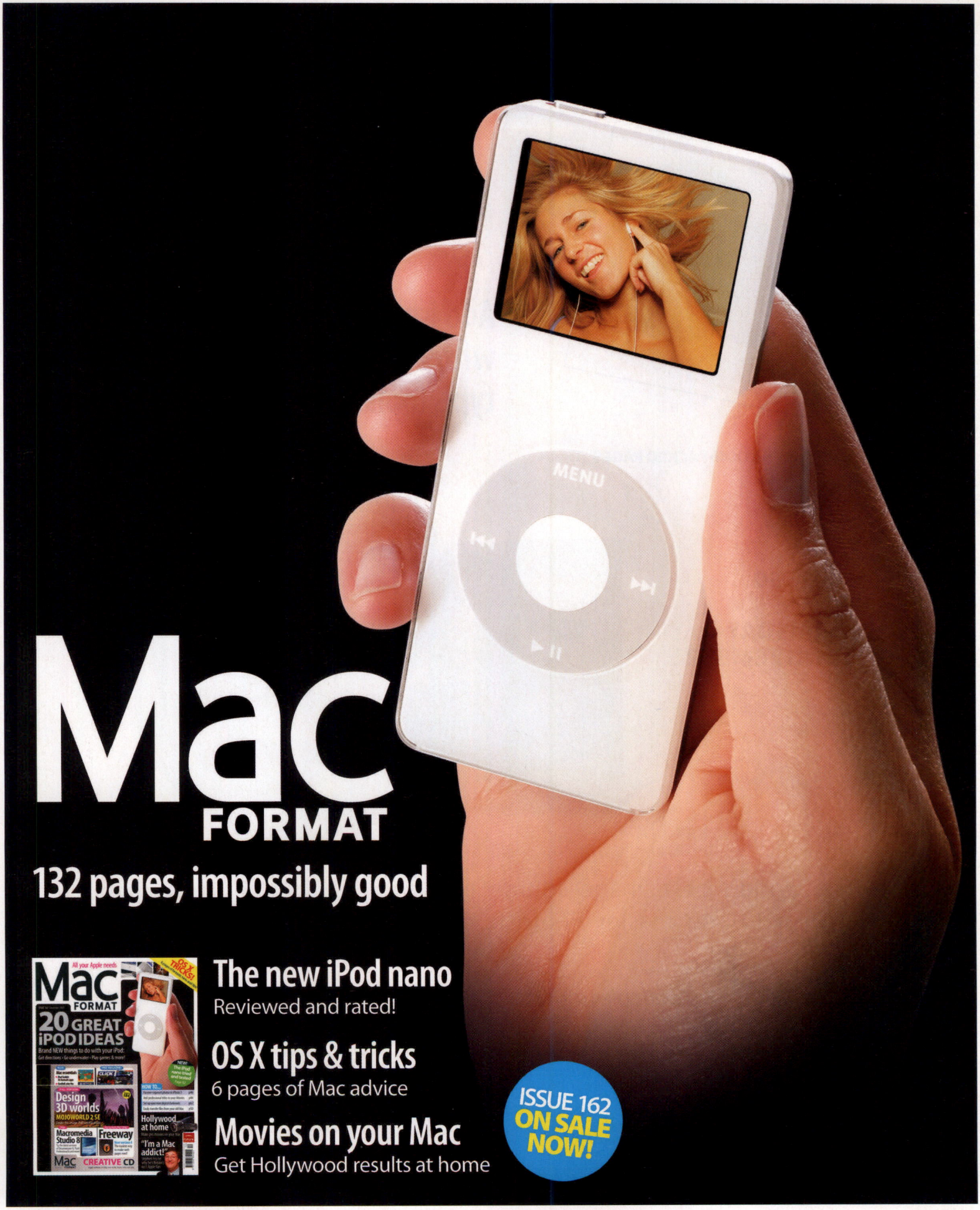
Kosmas has been combining his degree with full-time work in Athens and, more recently, Helsinki – a schedule that does much to explain the professional standard of his work. Produced using *Illustrator* and *Photoshop*, 'Paradise' (below) uses gorgeous layering effects and a fascinating level of detail, yet manages to stay a strong, coherent image. "I am always wandering what paradise could look like," Kosmas says. "I guess it differs for each one of us."

'Untitled' (left) is a lush piece that riffs on the idea of theatre, bringing together iconic images from different eras. "I've always been interested in optic art. It's really impressive what you can make through different picture combinations," says competition-winning Kosmas.

[e] giati_diafero@hotmail.com

WINNER!

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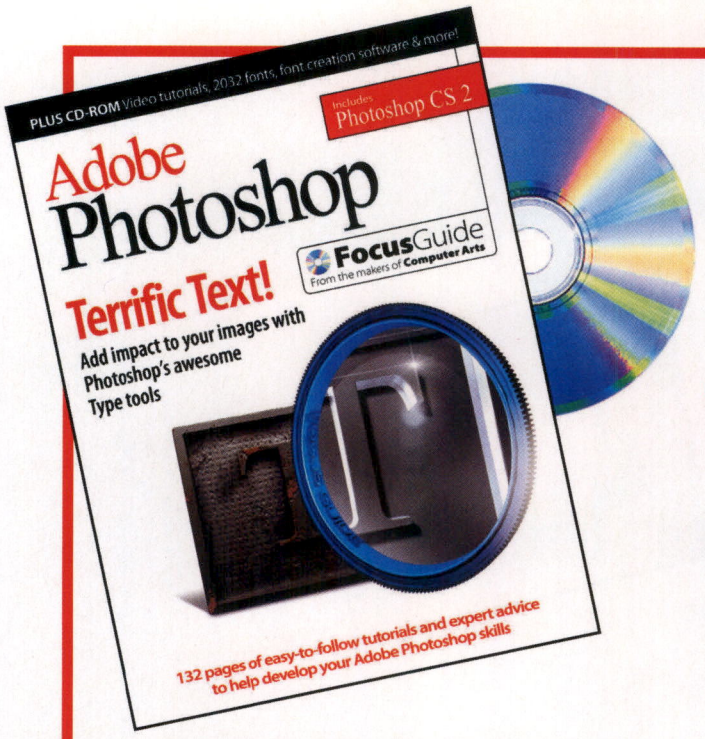
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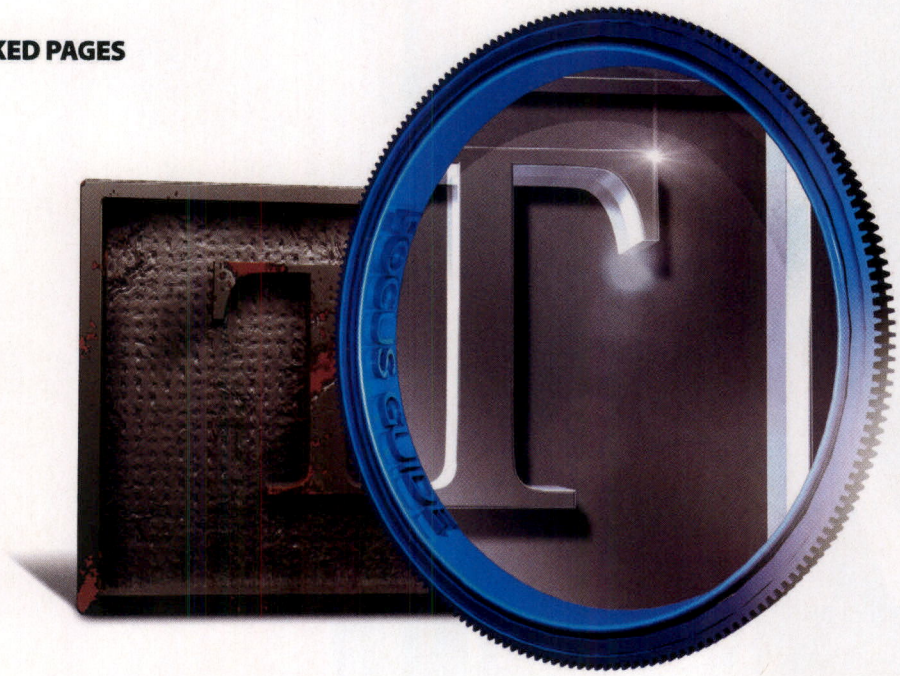

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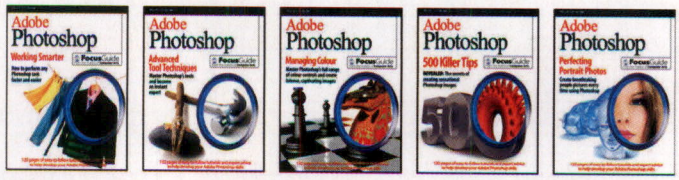

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COMPUTER arts projects BACK ISSUES

ISSUE 75: CODE COSB0075

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THE IN-DEPTH GUIDE FOR DIGITAL CREATIVES
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+ LAUNCH YOUR CREATIVE CAREER
ON YOUR FREE CD
IN THIS ISSUE: SURVIVE THE INTERVIEW • GET THE JOB
CREATE GREAT PROMO MATERIAL • SELL YOUR IMAGES
WORK ABROAD • PUT YOUR PORTFOLIO ON THE WEB

DESIGN GRADUATE SPECIAL

Features on how to get your first job and your options for studying further; advice on getting a career in illustration, type and 3D design; guidance on selling your imagery to stock libraries and working abroad. Thirty CV tips will help you to impress potential employees, and tutorials on creating promotional materials and web portfolios.
CD Full *TrueBlur* plug-in for *Photoshop*, *Extensis Portfolio 7* demo.

ISSUE 76: CODE COSB0076

THE ART OF TYPOGRAPHY: YOUR COMPLETE GUIDE TO GETTING STARTED WITH TYPE AND FONT DESIGN
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THE Type ISSUE
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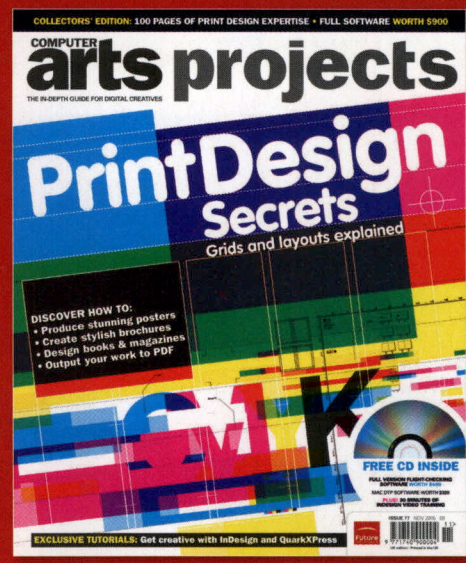
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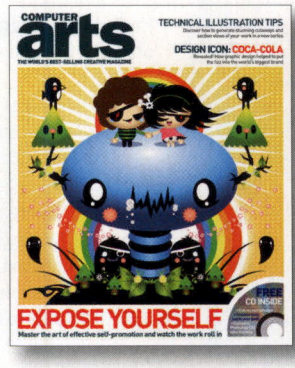
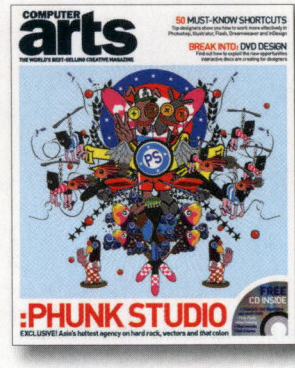
COMPUTER arts

COMPUTER ARTS, THE WORLD'S BEST-SELLING MAGAZINE FOR DIGITAL ARTISTS AND DESIGNERS, IS THE ONE-STOP SHOP FOR PROFESSIONAL ADVICE ON CREATING DIGITAL ART AND ILLUSTRATION.

ISSUE 114: CODE COB00114
Discover the art of pitching; sell your own merchandise; *Flash*, *Photoshop* and *After Effects* tutorials; printer group test.



ISSUE 115: CODE COB00115
Master the art of self-promotion; technical illustration tips; full *PagePlus 7* and *Toon Boom Studio Express 2.5* software.



ISSUE 116: CODE COB00116
Inside :Phunk Studio, Asia's hottest agency; 50 essential software shortcuts; get started with DVD design; *Canvas 8* full product.

All back issues cost £6. Postage free in UK. Add £1 per issue for European orders. Add £3 per issue for the rest of the world.

COMPUTER arts projects INTERACTIVE

DVD HIGHLIGHTS

PhotoWebber 2
Worth $129, this FULL application enables you to turn layered PSDs into HTML-compatible artwork with ease.

SiteGrinder
A demo of the successor to *PhotoWebber*. Follow our tutorials to both applications starting on page 92.

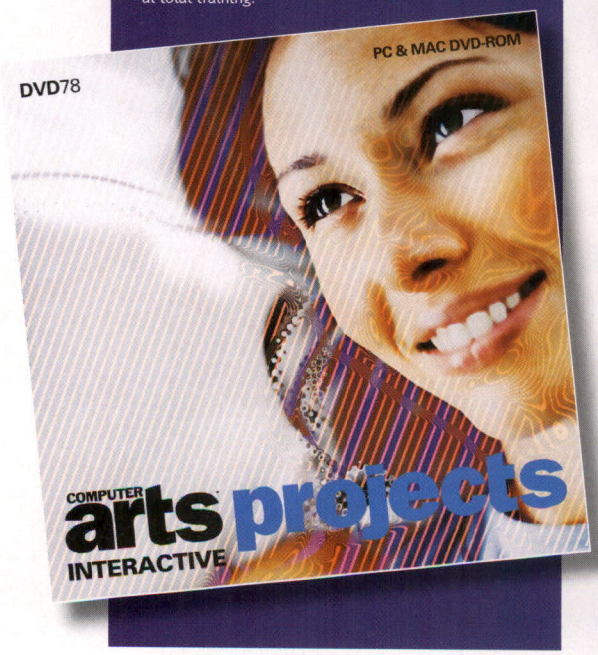
Photoshop CS2
A 30-day trial of Adobe's industry-standard photo-manipulation software.

Photoshop Elements 4
A 30-day trial of Adobe's surprisingly-powerful budget alternative to the full version of *Photoshop*.

ImageDJ PSDs
A whopping gigabyte of free high-resolution layered images from ImageDJ's online store.

Photoshop podcasts
The first five episodes of *Attention Photoshoppers*.

Photoshop CS2 video tutorials
More quality video training from the *Photoshop* experts at Total Training.



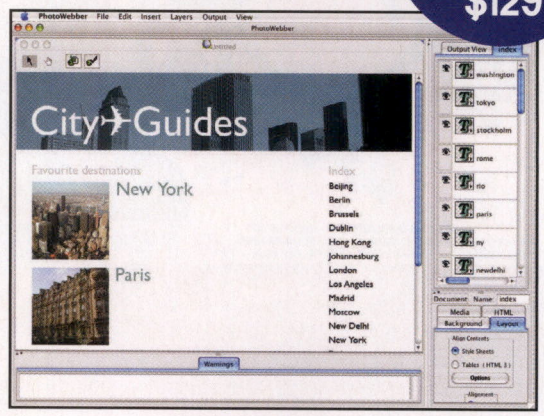
DVD contents

Free software, plug-ins, images, training and podcasts...

FULL SOFTWARE WORTH $129

PhotoWebber

Save time when converting your *Photoshop* designs to web pages...



This full version of *PhotoWebber*, as sold for $129, enables you to create web pages out of your *Photoshop* designs. So instead of starting with HTML constraints that force designers to make technical decisions up front, this software enables you to start with a completed *Photoshop* design and simply add the appropriate HTML commands and features to that existing design.

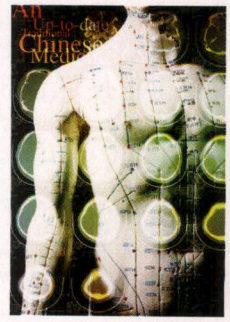
Any designer who has created graphics for the web using *Photoshop* knows how laborious it can be transferring ideas from a single *Photoshop* file to a collection of web-friendly GIF or JPG files. And all web programmers know how difficult it can be to get those graphics to appear in the correct positions on the resulting web page. With *PhotoWebber* it's no longer necessary to chop *Photoshop* files into little pieces and reassemble them manually in an HTML editor. *PhotoWebber* translates layered *Photoshop* files directly into matching HTML layouts effortlessly.

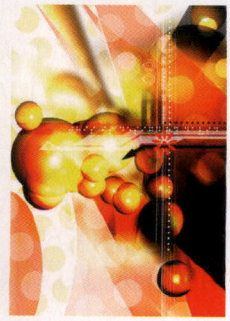
More info... To unlock this product you'll need a serial code from www.medialab.com/computerarts

Layered PSD images

Professional high-resolution *Photoshop* artwork for you to use in your projects...

ImageDJ





ImageDJ, provider of great royalty-free images, has ten high-quality layered *Photoshop* files for you this month.

As the first stock image provider to offer high-res layered files, ImageDJ continues to release new libraries of layered images that cover the most frequently requested subjects, keeping up with trends and fashion, from space journeys to urban landscapes, from cyber lifestyle to natural scenes, from the human body to animal textures, and much more.

The company has published 427 CD titles to date, each containing 50-100 high-res images. The products are also available in downloadable formats.

More info... www.imagedj.com/shopping/index.php?newlang=english

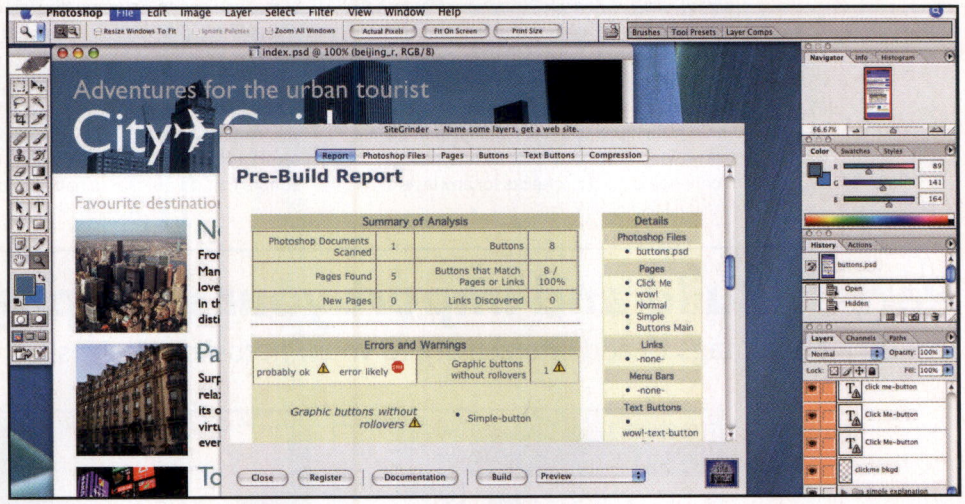
SiteGrinder

Try out this demo of the successor to *PhotoWebber*, renamed *SiteGrinder*...

PhotoWebber was built with the idea of converting a single *Photoshop* design to a single web page. *SiteGrinder* is coded from the ground up to enable you to build multiple pages or whole sites from a *Photoshop* design, and it's a plug-in, so you don't have to launch a separate application to do the job.

Users can create individual pages using *Photoshop* layouts, and pages and buttons that have the same name (such as products-page and products-button) are automatically hyperlinked together. Plus, *SiteGrinder* can 'derive' new pages automatically for any unassigned buttons. Check out the tutorial on page 94 to discover more of what *SiteGrinder* has to offer.

Computer Arts Projects readers can upgrade to this product from *PhotoWebber* for a special discount. Visit Media Lab's website for more information on this offer.



More info... www.medialab.com/computerarts

Photoshop podcasts

Expand your knowledge of *Photoshop* by listening to this great show...

Attention Photoshoppers! is a quality new podcast hosted by David Biedny. It includes segments on *Photoshop*-related news; step-by-step techniques to using *Photoshop* for production and artistic creativity; *Photoshop* book and companion product reviews; technical analysis; historical anecdotes; and interviews with *Photoshop* luminaries, authors, artists and developers.

David Biedny shares his insight and understanding of the history of the program, and tells his audience where all the skeletons are buried. Unlike other *Photoshop*-related shows, the host has no commercial agenda, is not hawking seminars and products, and is only interested in educating listeners about *Photoshop*.

More info... http://attentionphotoshoppers.libsyn.com

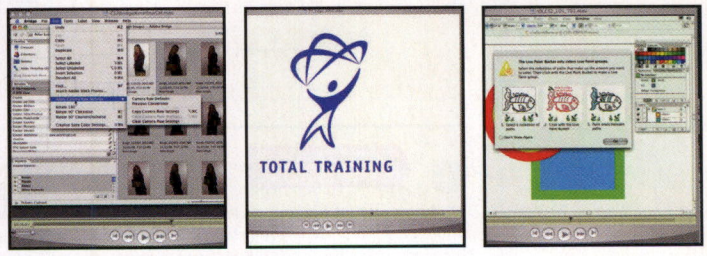
Photoshop CS2 video training

Gain more knowledge about Adobe's digital-imaging tool...

Where would an issue of *Computer Arts Projects* be without the now integral coverdisc video tutorials? This issue, we bring you a large selection of video samples taken from the retail version of Total Training's *Adobe Photoshop CS2* tutorial package.

Watch the videos and follow tutorials based on real scenarios to improve your *Photoshop* ability and learn the latest techniques. These videos are presented by Deke McClelland, a well-known expert and lecturer on *Photoshop* and the larger realm of computer graphics and design.

If you purchase the full retail version of the video, you'll receive the added bonus of stock photography from iStockPhoto and PhotoSpin.



More info... www.totaltraining.com

On your DVD PhotoWebber

Get to grips with this free full product and build a web page inside *Photoshop* using layers…

Designing an attractive web page typically requires coding skills that many graphic artists lack – or simply demands time that you don't have. *PhotoWebber* addresses both problems, enabling you to construct your web page with the familiar tools of *Photoshop*. When you bring your *Photoshop* file into *PhotoWebber*, you can convert your design into fully working HTML code.

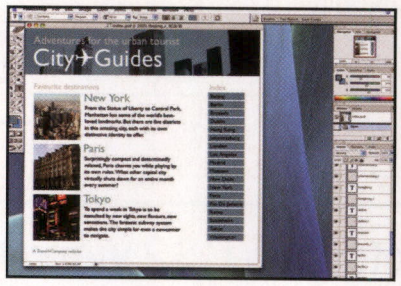
PhotoWebber takes the layers of your *Photoshop* PSD file and separates them into individual files, each compressed to download efficiently over an internet connection. It also checks for any layers you've associated together using simple layer naming conventions, creating interactive elements within your page on the fly. The output files are fully editable in an editor such as *GoLive* or *Dreamweaver MX*, and are ready to check in your browser.

The beauty of the *PhotoWebber* system is that you can make interactive elements in *Photoshop* rather than an unfamiliar web-editing application. All you need to do is add tags, or hints, to layer names: *PhotoWebber* recognises these and creates the effects you've specified. Although you rename any layer in *PhotoWebber*, the hints are so simple that it's quicker to name up the layers as you build them in *Photoshop*. *PhotoWebber* is ideal for anyone whose experience lies in *Photoshop* rather than HTML coding, but even a web designer will appreciate the speed with which you can assemble and test a concept design.

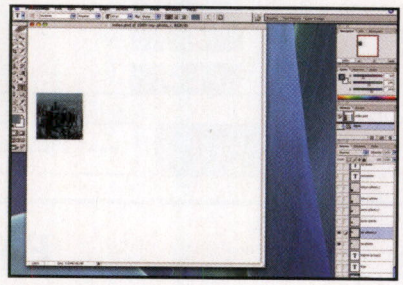
The *CAP 78* disc includes full versions for both Windows and Mac OS X. To use either, you must first obtain a serial number from Media Lab, *PhotoWebber*'s publisher. Visit the web page **[w]** www.medialab.com/computerarts, enter your email address and select your preferred operating system. You'll shortly receive a message containing the serial number you need.

Part 1: Build and import your web page

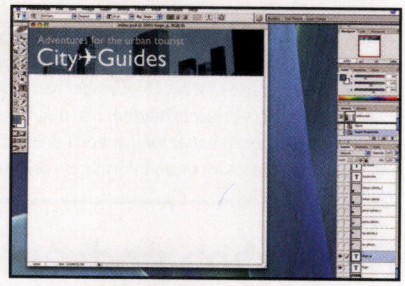
Use simple layer tags to add interactivity to your *Photoshop* designs…



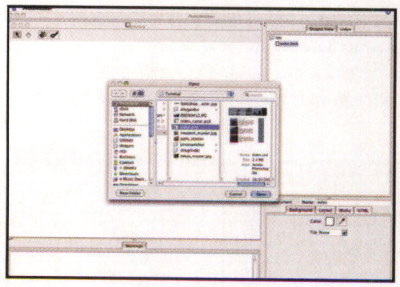
1 You can create two kinds of interactive effect, where moving your mouse over a component triggers an action. A rollover replaces one element with another that was previously hidden, while a pop-up displays a new element without removing the component that triggers it. A single component can trigger one rollover and as many pop-ups as you like.



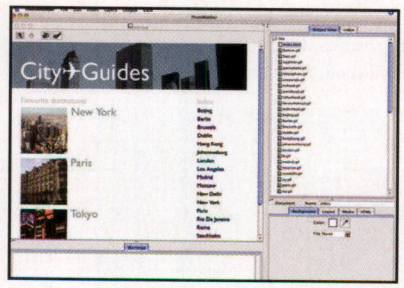
2 Position one layer element directly over another of the same size to create a rollover effect. Name the default layer – the one destined to be visible most of the time. Now give the same name to the rollover layer, but add '_r' to the end. *PhotoWebber* will automatically spot the hint and associate the two layers to work together.



3 To create a pop-up effect, select the layer you want to appear when prompted. Give it the same name as the layer intended to trigger the effect, then add '_p'.



4 *PhotoWebber* uses its own file format, which stores information needed to create the web page and your instructions on how to convert your *Photoshop* layers. When you start *PhotoWebber*, it creates a document into which you can bring your *Photoshop* file. Click the Import button in the top-left pane – its icon has a small '1' and a document thumbnail.

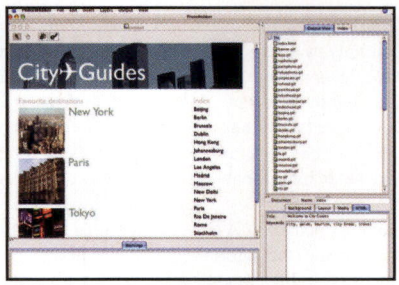


5 Import options include the ability to select only specific layers to use. If you named up your rollover and pop-up components in *Photoshop*, you can also choose to programme them now. If *PhotoWebber* detects any inconsistencies in the layers you set up in *Photoshop*, it will list faults in the Warnings pane.

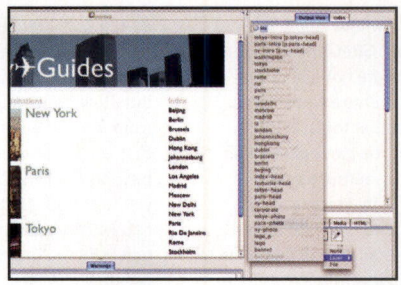
6 The Preview pane shows your page as it functions now. Use Select mode (the arrow icon in the top left) to click components and check their status. You can change any component's position. And you can select multiple layers with the Shift key. Enter Preview mode by clicking the hand icon, then explore your page to confirm that your rollover effects work.

Part 2: Prepare your web page in PhotoWebber

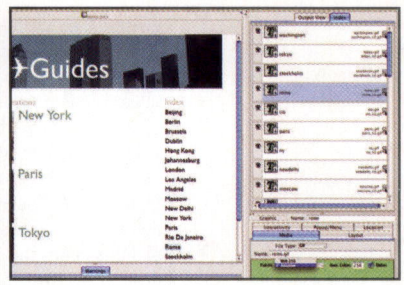
Add further interactive features and distinctive web touches to create an effective online presence…



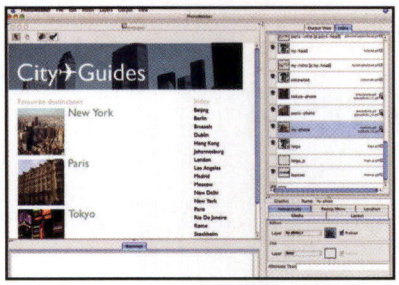
1 Under the Output View tab in the top right, click the Site folder for a page overview in the pane below. Here you can rename the HTML file, under the Media tab. Click the HTML tab to give your page a title, which later appears in the top of a browser window, and to add keywords to assist search engines.



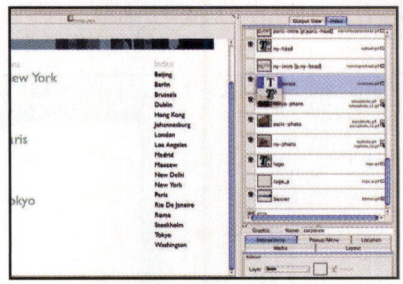
2 Click the Background tab to reveal tools for selecting a new overall background colour. You can also select an image file to use as the background: it will automatically repeat in a tiled effect. You can choose any of the layers you've imported or a separate file as your tile source.



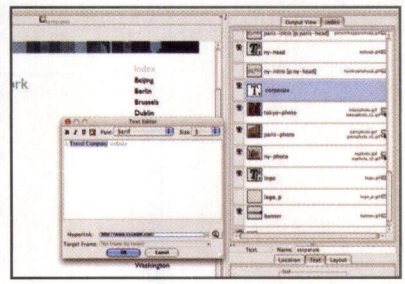
3 In the top-right pane, click the tab next to Output View. (The tab takes the name of your imported file.) With a component selected, the Interactivity tab in the pane below enables you to check and adjust rollover behaviour. With the Media tab, you can rename components and choose the web colour palette each should use.



4 You can also complete your rollover or pop-up components by adding a web link to them. Under the Interactivity tab, add a web address in the Hyperlink field.



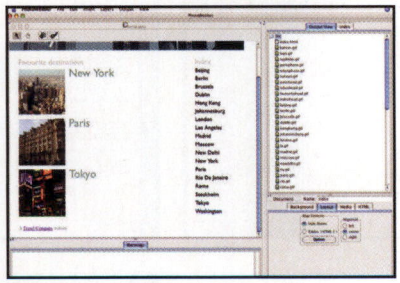
5 Text layers initially appear in *PhotoWebber* as graphics, but you can alter any text layer to output as HTML text. You can now add links within the text. In the top-right pane, select the text layer you want to change, then click on its preview thumbnail to access the option to change it from a graphic to editable text.



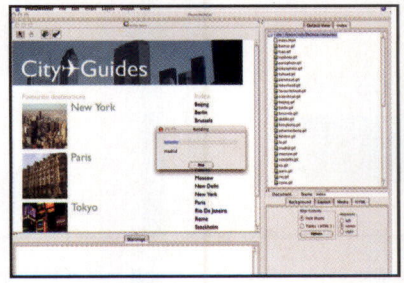
6 In the Editing pane above, select the Text tab then click the Edit Text Layer button. In the window that appears, you can change the text's style and colour in accordance with HTML conventions. If you select part or all of the text, you can make it clickable on the final web page by entering a web address in the Hyperlink field.

Part 3: Build and view your web page

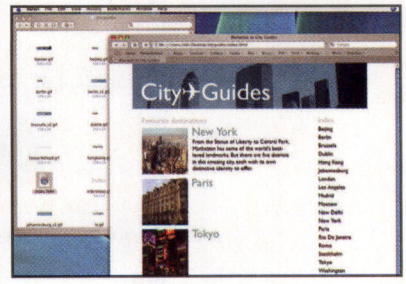
Complete the process by converting your *Photoshop* graphic to HTML…



1 Click the Layout tab to choose the coding technique *PhotoWebber* should employ: Tables or Style Sheets. You can also choose where the page should position itself when the browser window is wider than the page components.



2 Click the Build All button (with a '2' and a tick mark) in the Preview pane to convert the file to HTML. If you didn't already use the Output menu to choose where to save files, you can pick a folder now. The time taken to convert images depends on the number of layers and the image size, but the wait should typically be brief.



3 The HTML file and its accompanying graphics are now available in the folder you chose. You can open the HTML page in any browser to confirm its functionality, or bring it into a web-editing application to apply further enhancements. ca-p

On your DVD SiteGrinder

Using your free *SiteGrinder* demo is the easy way to create an entire website within *Photoshop*...

Picking up where *PhotoWebber* leaves off, *SiteGrinder* enables you to create not just single pages but entire websites, using *Photoshop*'s familiar tools. Within a single *Photoshop* file, you can define layer sets that are eventually output as several distinct HTML pages. Any graphics that appear on more than one page are shared, and this keeps the overall size of the website down. The HTML that *SiteGrinder* produces is based on the latest coding techniques, using Cascading Style Sheets to make highly efficient sites.

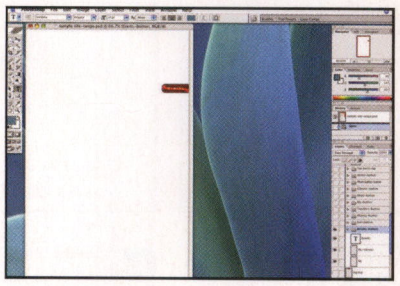
As in *PhotoWebber*, you can prepare effects in *Photoshop* simply by adding the appropriate hint to a layer name. The labelling convention is slightly different from *PhotoWebber's*, using a dash rather than an underscore. *SiteGrinder* goes far beyond *PhotoWebber's* set of hints, enabling you to set up rollovers, pop-ups and hyperlinks without leaving *Photoshop*. A powerful feature not covered in this tutorial is *SiteGrinder's* ability to assemble menus, which can even have sub-menu options. Consult *SiteGrinder's* built-in samples to see how the system works.

While *PhotoWebber* is separate but complementary to *Photoshop*, *SiteGrinder* is a *Photoshop* plug-in you can invoke at any time, taking advantage of its host's own web-compression features to convert your graphics for online use.

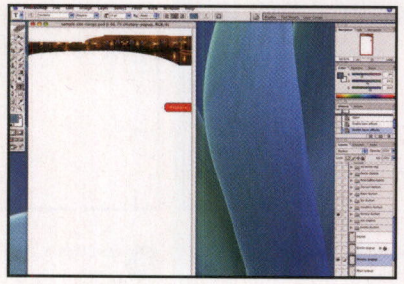
The demo version of *SiteGrinder* is fully functional, with no time limit or disabled features, but it does add a watermark logo to any pages you create. You can upgrade to the full version of *SiteGrinder* – and save 15 per cent on the regular price – when you order through the Media Lab website at **[w]** www.medialab.com/computerarts.

Part 1: Create your site in Photoshop

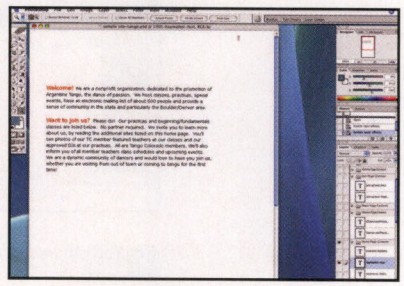
Name your layers in preparation for use in *SiteGrinder*...



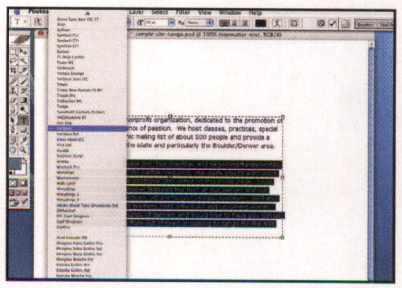
1 Just as in *PhotoWebber*, you can prepare interactive components by adding hints to layers in *Photoshop*. To set up a rollover button, position the two affected layers over each other. Add '-button' to the name of the default layer, which will be visible most of the time. The second layer should have exactly the same name as the first, but with '-rollover' in place of '-button'.



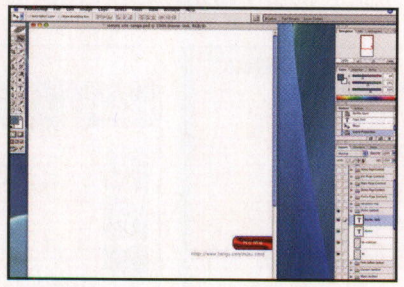
2 To create a pop-up, where the original layer remains visible rather than being replaced, add '-button' to the end of the trigger layer. Give the effect layer the same name, replacing '-button' with '-popup'. If you use '-popdown', the second element is visible at first, but disappears when you trigger the effect. One layer can trigger a rollover plus many pop-ups and pop-downs.



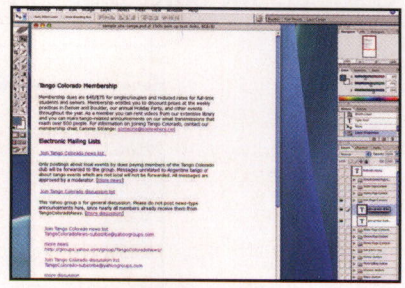
3 By default, *SiteGrinder* will convert any text layer to a graphic. To keep it as editable text, you can add either '-text' at the end of the layer name or check the text layer's anti-aliasing setting: if it's set to 'None', the layer will render as text in the final web page.



4 *SiteGrinder* uses modern CSS techniques to make any HTML text resemble its source layer as closely as possible, preserving style, size and leading. Note that your site visitors will need to have the fonts you choose installed to view the text properly, so it's safest to stick to recognised web-friendly fonts such as Verdana or Arial for all your HTML text.



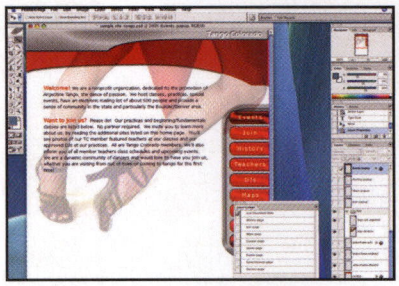
5 You can turn any text or graphic layer into a hyperlink within *Photoshop*. Add a new text layer whose contents are the web address to which you want the layer to link. Name it the same as your trigger layer, removing any existing *SiteGrinder* hints and adding '-link'. The link layer will not be visible in the final web page, only its trigger layer.



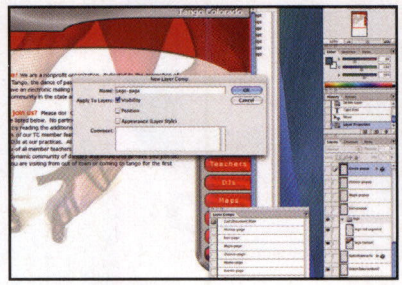
6 To display text with one or more links within it, name your text layer and add '-haslinks' to the end. The layer that holds the link data should end with '-links'. This time the layer includes a word or phrase from the triggering text layer, with its corresponding web page link on the next line. Enter successive links into this '-links' layer, with an empty line between each pairing.

Part 2: Make multiple pages

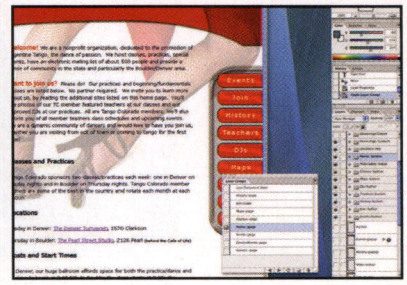
Use Layer Comps to define distinct pages in the same *Photoshop* file...



1 *Photoshop CS* introduces a powerful feature enabling you to create Layer Comps, effectively a snapshot of which layers are visible at the time the Comp is defined. *SiteGrinder* takes advantage of Layer Comps to help you define separate web pages within a single *Photoshop* file. Several pages can share the same basic graphics.



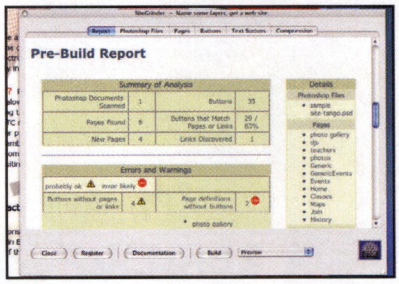
2 Create or make visible a unique element – say a text layer with information pertinent to only one page. With your chosen standard and unique components visible, create a new Layer Comp and name it. Add the *SiteGrinder* hint '-page' at the end. Hide the first page's unique elements, then create or make visible your second page's unique layers.



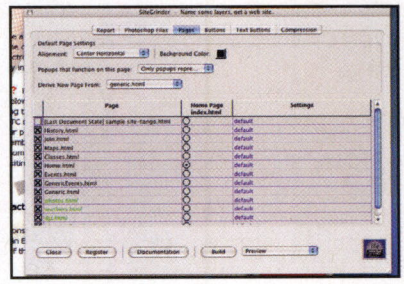
3 Add a second Layer Comp and name it, again ending with '-page'. You can add a link to any of your pages by creating a new layer named after your Layer Comp, but ending in '-button' rather than '-page'. You don't need a corresponding '-link' layer: *SiteGrinder* matches up the layer and Layer Comp for you.

Part 3: Review and build your pages

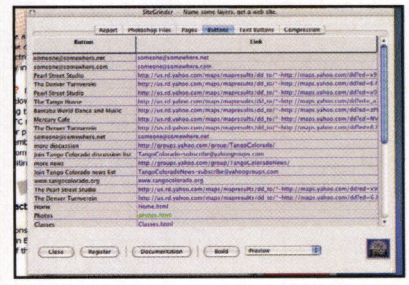
Check your links before you generate a website with just one click...



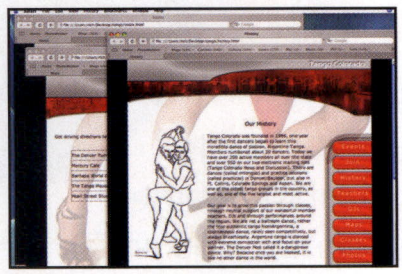
1 So far we've worked entirely in *Photoshop*, using hints that *SiteGrinder* interprets automatically. To invoke *SiteGrinder* itself, find the Automate option in *Photoshop*'s File menu and choose *SiteGrinder* from the sub-menu that appears. The plug-in automatically analyses your open file and produces a report detailing any flaws.



2 The Pages tab confirms that any multiple pages you set up have worked. You can change the background colour and alignment of any or all pages, and define one as your home page, automatically renaming it 'index.html'.



3 The Buttons tab enables you to review your interactive elements, such as buttons and menu components. You can add a hyperlink to any button by entering the address in the Links column. Use the Compression tab to set the extent to which *SiteGrinder* should compress graphics, using *Photoshop*'s own efficient web imaging technology.



4 The menu next to the Build button enables you to view a preview version or to nominate a folder for saving the finished files. *SiteGrinder* automatically hides *Photoshop* while it converts files, to speed up the process. You can view your completed pages in a browser straight away.

Upgrade and save!

Get 15 per cent off when you buy *SiteGrinder*...

Now that you've tried *SiteGrinder*, we're offering you the chance to buy the full version, which removes the watermark that appears when you output files in the demo. *SiteGrinder* normally costs $129 – around £73 – but you can get 15 per cent off that price.

To claim your discount, visit the Media Lab website at **[w]** www.medialab.com, and follow the *SiteGrinder* links. You will need your *Photoshop* version number and the first 16 digits of your *Photoshop* serial number. After you've added *SiteGrinder* to your shopping basket, you're invited to enter a coupon code as you type in your personal details. Enter the code 'COMPUTERARTS' to confirm your entitlement. The code is applicable only to orders placed through the Media Lab site.

After purchase, Media Lab will send you a serial number by email. When you next activate *SiteGrinder* through *Photoshop*, click the Register button and type in your serial number to remove the watermark limitation.

SiteGrinder requires *Photoshop 6* or later, and is available for Windows or Mac OS X. *Photoshop CS* is recommended so that you can use its Layer Comp features, although *SiteGrinder* does offer similar built-in functionality for users of older versions. ca-p

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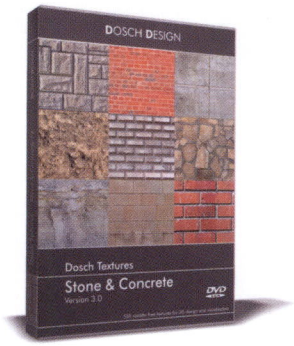
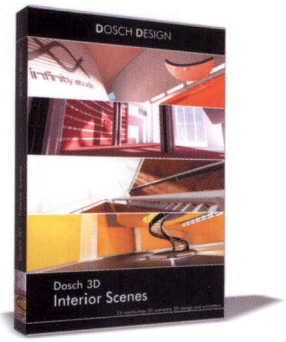


Dosch Textures:
Stone & Concrete V3



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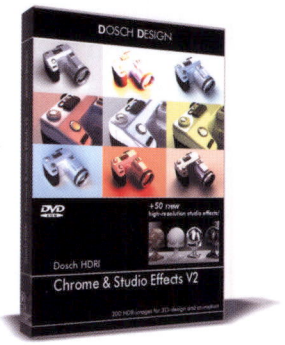

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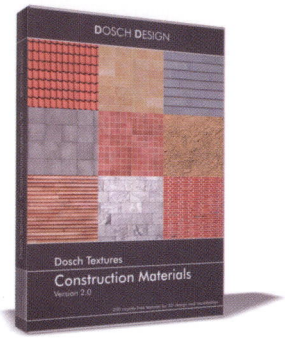

Dosch Textures:
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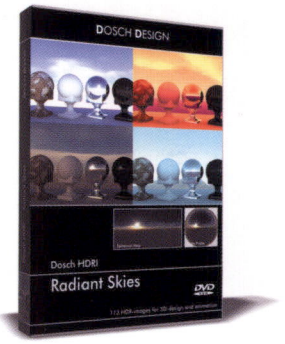
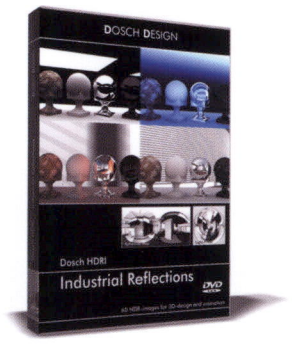


Dosch HDRI:
Radiant Skies



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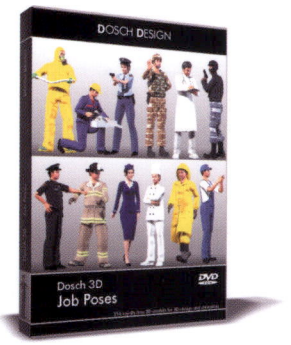

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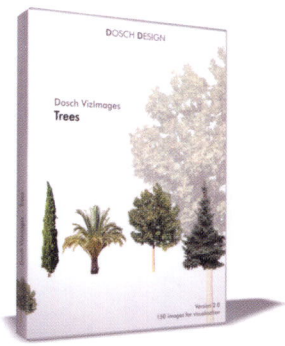
Job Poses



Dosch Viz-Images:
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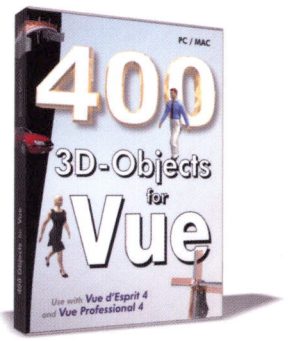

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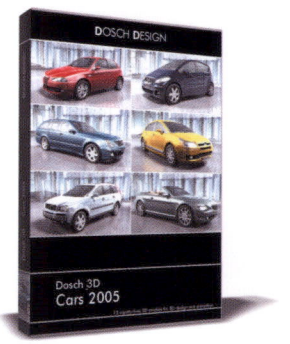

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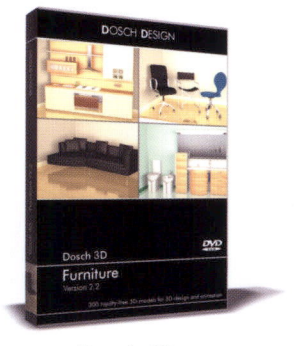

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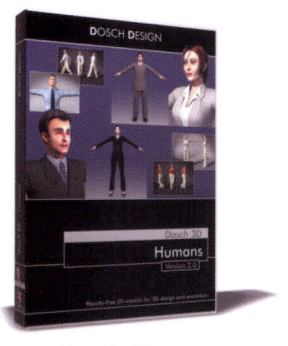
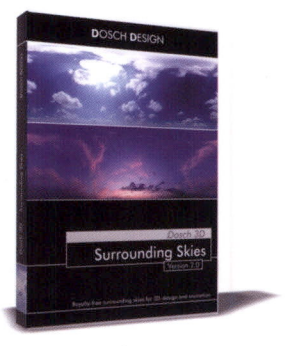
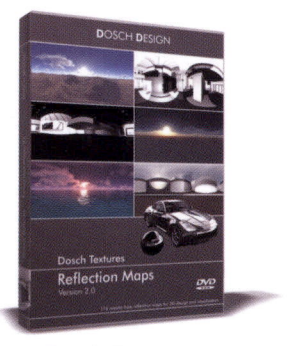


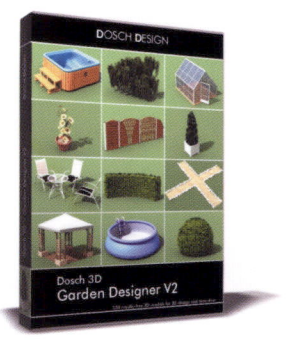
Dosch 3D:
Humans V2



Dosch 3D:
Surrounding Skies V2



Dosch Textures:
Reflection Maps V2



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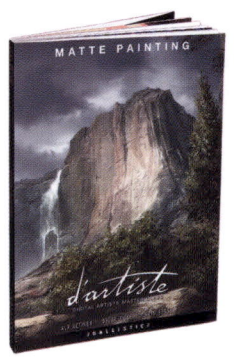

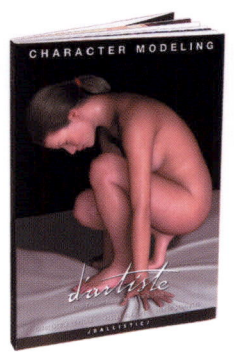

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